Department of History Aligarh Muslim University

Art and Material Culture in the Paintings of Akbar's Court

Som Prakash Verma



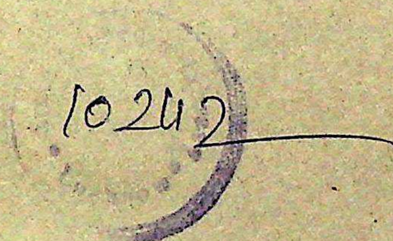
The place of Mughal painting in the history of World Art has long been undisputed. Of the Mughal Emperors, Akbar, especially, was interested, and it was under his patronage that painting began to flourish.

These paintings have been a source of continuous wonder to the connoisseur. Much has already been written on the subject, but till now the studies have focussed on the style and technique. Verma's approach is new and unusual. He interprets the paintings as a source of social and cultural history. While taking due note of style and technique, he concentrates on the content. The result is a fascinating glimpse into the lives of the people —especially the nobility—of Akbar's time, as each element of material, described in intricate detail, is so directly related to the needs, environment, habits and culture of the people.

This book, richly illustrated with miniatures and line drawings, will naturally be of interest to students of art and history. It is also recommended to persons curious to know about life during the Mughal times.

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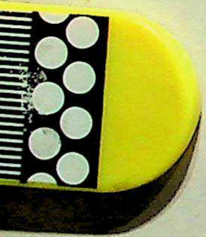






ART AND MATERIAL CULTURE IN THE PAINTINGS OF AKBAR'S COURT

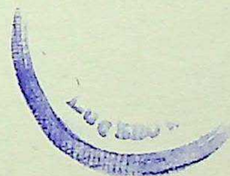
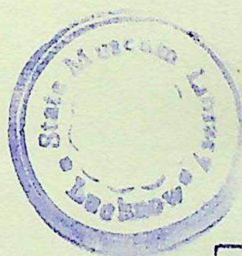




CENTRE OF ADVANCED STUDY
DEPARTMENT OF HISTORY
ALIGARH MUSLIM UNIVERSITY

ART AND MATERIAL CULTURE IN THE PAINTINGS OF AKBAR'S COURT

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VIKAS PUBLISHING HOUSE PVT LTD
New Delhi Bombay Bangalore Calcutta Kanpur

VIKAS PUBLISHING HOUSE PVT LTD
5 Ansari Road, New Delhi 110002
Savoy Chambers, 5 Wallace Street, Bombay 400001
10 First Main Road, Gandhi Nagar, Bangalore 560009
8/1-B Chowringhee Lane, Calcutta 700016
80 Canning Road, Kanpur 208004

Som Prakash Verma (1942)

ISBN 0 7069 0595 4

1V02V0603

Printed at Dhawan Printing Works, Mayapuri, Phase-I,
New Delhi-110064

To the sacred memory
of my father,
the late Babu Ram Verma

foreword

Within a span of less than half a century, a large number of manuscripts were illustrated at Akbar's court. These manuscripts covered a wide range of subjects and themes comprising contemporary events, as in *Akbarnāma*, or near contemporary events, as in *Bāburnāma* and *Tārīkh-i-Khāndān-i-Tīmuriya* or what the artists' vision was of situations mentioned in sacred Indian books like *Mahābhārata* and *Rāmāyana*, or in stories and fables like the *Dāstān-i-Amīr Ḥamza* and *'Iyār-i-Dānish*. Akbar employed at his court a very large number of painters, over a hundred of whom, according to Abu'l Fazl, "became famous masters of the art." These painters were drawn from very different backgrounds and represented different cultural and artistic traditions. They included older Persian masters like Mīr Saiyid 'Ali of Tabrīz or Khwāja 'Abd-uṣ-Ṣamad of Shīrāz; Indians from the lowest classes like Daswanth, who was the son of a *kahār*, and many others from different parts of the country, such as Kēsho, Lāl, Mukund, Miskīn, Farrukh Qalmāq, Mādho, Jagan, Mahēsh, Khēmkaran, Tārā, etc. It was therefore inevitable that these paintings would provide massive evidence of material culture of India during the second half of the sixteenth century. While paintings and sculpture have been studied for understanding the cultural traditions of the ancient period, similar studies for the medieval period, have, on the whole, been rather inadequate. This was unfortunate, because Akbar's reign is one of the very documented periods of medieval Indian history, and documentary evidence and the evidence in these very large number of paintings can supplement each other ideally.

Dr Som Prakash Verma has responded to this important challenge and his book constitutes a valuable contribution to our knowledge of the field. The area covered by him is very wide, from tentage, draperies and furnishing to clothes, untensils, crockery and cutlery, musical instruments, ensignias of royalty, arms and armour, technological devices, means of production and communications and valuable details about the appearance and way of living of different sections of the common people. The correlation of documentary and artistic evidence, which is by no means an easy task, has been attempted with a great deal of success by the author, for which he deserves our gratitude. Those who are interested in the

history of science and technology, or economic and social history, or in military history, will find the work to be invaluable.

The student of cultural and art history of the period would also find the book to be of inestimable value. The author, himself an artist and painter, has all along brought out the artistic significance of the paintings which he has examined and thus made a major contribution to our knowledge of the history of art during the period.

The Centre of Advanced Study in History of the Aligarh Muslim University has, since long, recognized that the history of people can be intelligible only if it is multi-faceted, and all aspects of the life of the people need to be studied in depth. In addition to political history and the study of administrative institutions, social and economic history; history of religion, thought and literature; history of science and technology; historical geography; history of painting, music and architecture; archaeology, etc., have been taken up by the Centre. Dr Verma's book is an important link in this chain.

S. NURUL HASAN

New Delhi
8 May 1978

acknowledgements



For the production of this revised version of my doctoral thesis I stand heavily indebted to distinguished scholars whose association with this work I acknowledge with a deep sense of pride and gratitude.

Foremost among them is Professor S. Nurul Hasan, former Head of the Department and at present Professor in the University of Delhi. But for his illuminating guidance in the early stages of research, his instruction in the cultural significance of Mughal illustrative art and his generously placing at my disposal his cherished collection of miniatures this work could well have remained bereft of much of its originality.

I am no less indebted to Professor Khaliq Ahmad Nizami who took over as my guide subsequent to Professor Hasan's joining the Central Ministry as Minister of Education. He took keen interest in my work and found time to go through the chapters in spite of his multifarious responsibilities.

My special thanks go to Professor Irfan Habib, whose keen historical insight and judgement were of immense help to me. He made available his own research material on technological devices, subjected my narrations to rigorous scrutiny and finally got the book through the press with an inimitable sense of concern and responsibility.

I owe an expression of thankfulness to Professor A.W. Kureishy for advising me on a variety of matters concerning the artware depicted in the paintings.

I am sincerely grateful to Dr. M.S. Randhawa, former Vice-Chancellor, Punjab Agricultural University, Ludhiana, a well-known critic and historian of art. He went through my script twice and gave useful suggestions.

I wish to especially mention Mr M.A. Alvi, my senior colleague in the Department. His keen interest in my work and his enlightening discussions on the intricacies of research, interpretation and presentation proved to be my mainstay.

Special thanks are due to another senior colleague Mr A.J. Qaisar, for his sincere and friendly support and stimulating assistance during the preparation of the manuscript and for his valuable suggestions after reading the first draft of the manuscript.

With profound feelings of love and gratitude I recollect here the name of Professor R.S. Bisht, Dean, Faculty of Fine Arts, Lucknow University and a renowned artist himself. He was my teacher of art. What I learned from him will remain always the most cherished of my accomplishments.

I have indeed been very fortunate to elicit the personal interest and advice of some of the most renowned historians of Indian art, namely, Professor Niharranjan Ray, Dr Rai Krishnandasa, Dr Anand Krishna, Dr Chandramani Singh and Dr Promod Chandra. They were generous with their time. I never heard them without admiring their insight and knowledge of the subject.

I cannot pass on without mentioning the names of some of my friends—I.A. Zilli, S. Shafiullah, K.K. Trivedi, Majida Khan and Drs M.Y.M. Siddiqui and R.A. Alavi—who have helped me in various ways towards the completion of this work. Dr Iqbal Husain, Tariq Ahmad and Dr Pushpa Prasad obliged me by reading the proofs and preparing the index.

My grateful thanks are due to the authorities of Khuda Baksh Oriental Public Library, Patna; Bharat Kala Bhavan, Varanasi; American Institute of Indian Studies, Varanasi ; Indian Museum, Calcutta ; National Museum, Delhi ; Red Fort Museum, Delhi ; Archaeological Survey of India Library, Delhi ; State Museum, Rampur ; State Museum, Jaipur ; State Museum, and Picture Gallery, Baroda ; Maulana Azad Library, AMU, Aligarh and Seminar Library of our Department for their cooperation.

Last, but not least, I must salute the members of my family for their patience, understanding and companionship.

None of those whose assistance has been of such value to me are of course responsible for any error that may still remain and for these I crave the indulgence of the reader.

Aligarh
21 December 1977

S.P. VERMA

abbreviations



Ā'in	*Ā'in-i Akbarī*
Akb	*Akbarnāma*
Anwār	*Anwār-i Suhailī*
Bāb	*Bāburnāma*
Bād	*Bādshāh Nāma*
Bahā	*Bahāristan* of Jāmī
Baltimore	Walters Art Gallery, Baltimore
Baroda	State Museum and Picture Gallery, Baroda
Berlin	Staatisbibliothek, Berlin
BL	Bodleian Library, Oxford
BM	British Museum, London
BN	Bibliotheque Nationale, Paris
Bombay	Prince of Wales Museum, Bombay
Boston	Museum of Fine Arts, Boston
Brooklyn	The Brooklyn Museum, New York
Calcutta	Indian Museum, Calcutta
CB	Chester Beatty, Dublin
Cleveland	The Cleveland Museum of Art, Cleveland
Dārāb	*Dārābnāma*
Delhi	National Museum, Delhi
Dīwān	*Dīwān-i Ḥāfiẓ*
DīwānAn	*Dīwān* of Anwarī
DīwānAS	*Dīwān* of Amīr Shāhī
Fogg	Fogg Art Museum, Boston
Gulistan	Gulistan Library, Tehran
Gulistān	*Gulistān* of Sa'dī
Hamzā	*Dāstān-i Amīr Hamzā*
Hari	*Harivansha*
'Iyār	*'Iyār-i Dānish*
Jaipur	State Museum, Jaipur
Jāmi	*Jāmi'ut Tawārīkh*
Khamsa	*Khamsa* of Khusrau
KhamsaN	*Khamsa-i Niẓāmī*
London	India Office Library, London
Louvre	The Louvre, Paris

M'aāsir	*M'aāsir-ul Umrā*
Mahā	*Mahābhārat*
Moscow	State Museum of Oriental Culture, Moscow
Muntākh	*Muntākhabu-t Tawārikh*
Murqq'a	*Murqq'a-i Gulshan*
Nafāhat	*Nafāhat ul Uns*
OSL	Oudh State Library
Patna	Oriental Public Library, Patna
Rām	*Rāmāyan*
Rampur	Rampur State Library
RAS	Royal Asiatic Society
Razm	*Razmnāma*
Salarjung	Salarjung Museum, Hyderabad
Shāh	*Shāhnāma*
SOAS	School of Oriental and African Studies, London
Tā'rīkh	*Tā'rīkh-i Khāndān-i Timūria*
Tehran	Imperial Library, Tehran
Tūtī	*Tūtīnāma*
Tūzuk	*Tūzuk-i Jahāngīrī*
VA	Victoria and Albert Museum, London
Varanasi	Bharat Kala Bhavan, Varanasi
Vienna	Industrial Museum, Vienna
Volberkunde	Volberkunde Museum, Vienna
Washington	Freer Art Gallery, Washington

introduction

Mughal painting has evoked considerable interest among the connoisseurs of art all over the world. Renowned for their brilliant colours, accuracy in line drawing, detail, realism, intricacy and variety of theme, Mughal paintings are a class by themselves, distinct from all other styles and techniques of pre-Mughal or contemporary Indian art. Akbar was the first Mughal monarch who took a deep interest in the promotion of painting, and following the Mongol and Timurid examples he commissioned the work of illustrating numerous manuscripts. When he was a child at Kabul with his father Humāyūn, he had the opportunity to study Persian painting in the company of the Persian painters Khwāja 'Abu'ṣ-Ṣamad and Mīr Saiyid 'Alī. But the art that flourished under Akbar did not entirely stem from these painters. Akbar had independent views and, indeed, he considered painting to be one of the means to recognize God.[1] Similarly, the lines written about the perfection of 'Abu'ṣ-Ṣamad's skill in the *Ā'in-i Akbarī*[2] (hereafter *Ā'in*)—"mainly due to the wonderful effect of a look of His Majesty, which caused him to turn from that which is form to that which is spirit"—reflect Akbar's views on art in general.

Akbar created a new synthesis of art from the heterogeneous elements viz. Persian, Central Asian and Indian, gathered at his court. The veneration which Mughal painters had for the Persian *qalam* is evident on the pages of the *Dāstān-i Amīr Hamzā* (hereafter *Hamzā*)[3]. These illustrations are the first known example of Akbari art and form the ground of the Mughal painters. These were painted on an unprecedented scale on a piece of cloth measuring 67.5 × 50 cm. Their size exceeded all the other book-illustrations of India. Basil Gray[4] states that the *Hamzā* paintings belonged to

[1] *Ā'in*, tr. Blochmann, I, p. 115.

[2] *Ibid.*, p. 114.

[3] Of all the Mughal manuscripts, this one is the most extraordinary. No less than 200 folios of it are known to have been preserved in the various collections at Brooklyn, BM, VA, Vienna, CB and Varanasi.

[4] Barrett and Gray, *Painting in India*, p. 78. Badā'ūnī has incidentally mentioned the paintings employed to decorate the audience chamber on the occasion of the celebration of Akbar's twenty-eighth regnal year, but he does not characterize them : hence the use of *Hamzā* paintings for wall-decoration remains a conjecture, (*Muntakhābu-t Tawārīkh*, tr. W.H. Lowe, II, p. 310).

the tradition of tent-hangings. It was mainly the work of Mīr Saiyid 'Alī and K͟hwāja 'Abu'ṣ-Ṣamad, assisted by several other artists.[5] However, as the names of the artists are not given on the margins of the pictures (as was the tradition in later days), it seems that a few creations belonged to Basāwan also.[6] Abu'l Faẓl has mentioned that the story of *Hamzā* was illustrated to fill 12 volumes and the illustrations were made for no less than 1004 passages of the story.[7] It indicates that the whole *Hamzā* was not illustrated. This contradicts the reference made in the *M'aāsir ul Umrā* (hereafter *Ma'āsir*),[8] wherein the author tells us that Akbar had the wonderful incidents of that story illustrated throughout the book and set it up in 12 volumes. The greater number of paintings must have taken some years to complete.[9] While giving an account of 1582, Badā'ūnī has mentioned that Akbar had the *Shāhnāma* (hereafter *Shāh*) and the *Hamzā* illuminated, and this undertaking took 15 years to complete.[10] It shows that the *Hamzā* paintings were available at the Mughal court a few years earlier than 1582, and accepting the length of time it took for completion, these paintings may be dated 1560-1575. The early *Hamzā* paintings are characterized by the Persian-Safavid tradition where symmetrical compositions and restricted movement persist. Lately, these have been distinguished from others for the representation of dynamic movement, turbulent action, dense foliage of trees and expanses of bright colours (Pl. I). One finds distinct dissimilarities in the Persian miniatures, given in the name of Mīr Saiyid 'Alī, and the *Hamzā* miniatures.

The fusion of the Persian and Indian styles may also be seen in the illustrations of the *Tūtīnāma* (hereafter *Tūtī*), newly discovered by Sherman Lee. Though it is undated it can be safely presumed not to have been illustrated later than the *Hamzā*. In the illustrations of the *Tūtī*, the artists trained in different traditions have contributed their work, subsequently a few miniatures have been associated with the *Hamzā* style (Pl. II) and others have the striking features of pre-Mughal Indian art. The latter reveals itself in the elongated eyes, faces in profile, triangular ends of costumes, straight tree-trunks, stylized leaf forms, plantains and dense foliage—all reminiscent of the *Chaurāpanchṣikā* style (Pl. III). The representation of buildings and landscape is similar to that in the *Hamzā* paintings. The drawings of animals and birds blended with a more distinctly Indian feel indicate the emergence of the Mughal school of art.

[5]*M'aāsir-ul Umrā*, tr. Beveridge, I, pp. 454-55.
[6]*Encyclopedia of Word Art*, II, pp. 385, 387.
[7]*Blochmann, op. cit.*, p. 115.
[8]*Beveridge, op. cit.*, p. 454.
[9]Most of the scholars have mentioned that there were 1400 illustrations. However, it is clearly mentioned in the *M'aāsir* that the *Hamzā* was set in 12 volumes and each volume contained 100 folios and each folio contained two pictures. Thus their number may be 2400 (*ibid.*).
[10]Lowe, *op. cit.*, p. 329.

The miniatures of the *Anwār-i Suhailī* ([hereafter *Anwār*] dated 1570), preserved in the School of Oriental and African Studies (hereafter SOAS), are more acclimatized to Indian realism where the animals are portrayed comparatively more naturally and with a greater sense of movement (Pl. IV). The trees also vary and Indian species—banyans, plantains, mangoes and palms—appear frequently. Nevertheless, the placement of figures, the depiction of landscape—the sky painted deep blue, generally with a tinge of orange and gold—remain identical with the Persian conventions. Action is portrayed in the *Hamzā* paintings, but it is violent, whereas in the *Anwār* it is natural, rhythmic and vital. Thus by 1570 the propensity for similarity is very apparent in the works of Mughal artists.

Greater sympathy for, and more faithful representation of, birds and animals may further be observed on the folios of the *Gulistān* of Sa'dī ([hereafter *Gulistān*] dated 1581) in the Royal Asiatic Society London, (hereafter RAS), the *Dīwān* of Amīr Shāhī (hereafter *DīwānAS*) in the Bibliotheque Nationale, Paris, (hereafter BN), and the *Dīwān-i Ḥāfiẓ* (hereafter *Dīwān*) in the collections of the British Museum (OR. 7573) and Chester Beatty Library (Indian MSS. 15 and 150) (hereafter BM and CB respectively). In these manuscripts birds are painted in the small panels to decorate the text. The manuscript of the CB collection is dated 1582. These illustrated manuscripts mark the passage of the Mughal *qalam* which became progressively evident.

Under Akbar, painting seems to have been confined to the illustration of manuscripts. Abu'l Faẓl has mentioned only a few of the illustrated manuscripts though several volumes of such manuscripts and stray folios have survived to this day.[11] The best known may be noted : *Hamzā*, *Tūtī*, *Dīwān*, *Gulistān*, *Dīwān* AS and *Anwār*. There are also the *Dārābnāma*, *'Iyār-i Dānish*, *K͟hamsa* of Amīr K͟husrau, *Razmnāma*, *Rāmāyan*, *Bāburnāma*, *Akbarnāma*, *Tā'rīk͟h-i K͟hāndān-i Timūria*, *Harivansha* and *K͟hamsa-i Nizāmī* (hereafter *Dārāb*, *'Iyār*, *K͟hamsa*, *Razm*, *Rām*, *Bāb* *Akb*, *Tā'rīk͟h*, *Hari* and *K͟hamsaN* respectively). As a result of Akbar's sympathy for Hinduism and under the policy of encouraging understanding among the people of his kingdom, Hindū themes were equally favoured and consequently, the great books of the Hindu were translated into Persian. The *Mahābhārat* (hereafter *Mahā*), *Rām*, *Hari*, the *Kathā-Saritsāgar*, were taken up for illustration.

In the present study, a few selected manuscripts belonging to different periods and varying in their themes—fables, literary and historical works, like the *Dīwān*, *Razm*, *Tā'rīk͟h*, *Bāb* and *Akb* have been especially referred to, besides many other useful works. Several copies of these manuscripts, embellished with paintings, have survived because many copies of a manuscript were prepared to meet the demand of the royal library, harem, nobles, etc. Subsequently, the dates of their completion varied. Extensive libraries were established at Agra, Delhi and other places. They

[11]Blochmann, *op. cit.*, p. 115.

were supplied with the originals and the translations of Hindi, Persian, Greek, Kashmīri and Arabic books. The manuscripts were adorned with rich binding and miniature paintings. Large sums were spent on illuminating these manuscripts.

The *Dīwān* contains the *gazals* and *qasīdās* composed by Muḥammad Shamsuddīn, commonly known by his title Ḥāfiẓ. The colophon of the manuscript belonging to the CB collection is given on folio 53 as AH 990 (AD 1582) and the name of the copyist is 'Abd-al Ṣamad. The opening folio of the copy representing different seals displays the circular seal of Akbar with the words—*Allāhu Akbar Jalla Jalālhu* and a small circular seal—*Maḥtawī Allāhu Akbar*, with the date of '90 (probably AH 990). It is fragmentary and contains only 53 folios. Folio 7 contains a full-page miniature. Throughout the volume, there are a number of small panels of bird-illustrations, generally drawn in pairs and amidst foliage. Among them the blue jay, the green pigeon, the kingfisher, and the *sāras* (crane) can be recognized. Margins are decorated with a variety of conventional floral designs and motifs of animals in gold.

Another copy of the *Dīwān* preserved in the Rampur State Library (hereafter Rampur) is in good condition, though incomplete. It opens with an introduction which runs into seven folios from two to eight. The writer has not disclosed his name in the text. There are 404 folios including 11 miniatures, painted by the artists of Akbar's court. The present copy was purchased in AH 1273, (corresponding to 31 January 1857) by Muḥammad Kalb-ī 'Alī *Walī 'aḥad*, Rampur, from Muḥammad Akram, grandson of Ḥāfiẓ Khurshid Khushnavis Lakhnavī. Besides the autograph and the seal of *Walī 'aḥad*, Rampur, there are the impressions of other autographs and seals, but these are faded and thus illegible. These faded impressions indicate that the manuscript, before passing into the hands of Muḥammad Akrām was preserved in some imperial library, as was the tradition till the close of the eighteenth and the beginning of the nineteenth centuries.

The colophon of the manuscript is missing, but it may be ascribed to 1585. The distinct similarities in the setting of the text, in the division of the two columns by two narrow gold lines, the use of red ink in the text, the decoration of margins with conventional motifs of animals and flowers represented in line drawing and painted in gold pigment in both copies of the *Dīwān* (CB and Rampur) indicate that most probably they belonged to the same period. The decoration of margins is almost identical. The painters who worked on its folios—Kānhā, Manohar, Narsingh, Sānwalā, Farrukh Beg and Farrukh *Chela*—seem mainly to have been inspired by the Persian traditions, though a gradual change in the mode of expression may be seen in their later works.[12] The most distinguished

[12] Farrukh *Chela : Anwār*, f. 30 (Varanasi); *Razm*, pls. 80, 137 (Jaipur); *Tā'rīkh*, ff. 101, 108 (Patna), and *Bāb* pl. 4 (BM). Kānhā : *Akb*, pls. 12, 13, 64, 97 (VA); *Razm*, pls. 15, 29, 30, 59, 81, 98, 99, 115, 121, 122 (Jaipur). Manohar : *Bāb*, pl. 42 (BM). Sānwalā : *Razm*, pl. 4 (Jaipur); *Tā'rīkh*, f. 206 (Patna); *Akb*, pl. 31, 54, 92, 107 (VA), ff. 71, 122 (CB); *Bāb*, pls. 19, 38.

picture of the manuscript on f. 177, painted by Farrukh *Chela*, depicts a background comprising hills, trees and plants and the human figure drawn with three-quarter face, a style associated with the Persian *qalam*. The tendency to use off-shades and slithering shapes, specially in the representation of animal figures observed in the present example has also survived in the later works of the artist (Pl. V). Similarly, the profuse decoration, the sky painted in gold, objects drawn from bird's-eye view, three quarter faces and two-dimensional shapes, etc., displayed on f. 314, by Farrukh Beg, drew the art of the *Dīwān* close to that of the Persian miniatures (Pl. VI). The painters mostly preferred three-quarter faces, long, loose costumes reminiscent of the Persian tradition and profuse decoration of the floor, carpets, etc. In the representation of landscape, too, the artist was mostly inspired by the Persian style. Folio 74, painted by Sānwalā, represents the whole landscape in the same *qalam*, (Pl. XXVIII) though the Indian trends are not wanting; they are evident in the process of thin shading, treatment of plantains, dense foliage, straight tree-trunks and rhythm in the human figures. The painters of the *Dīwān* of Anwarī, ([hereafter *DīwānAn*] dated 1588) have shown further change. Here, the traits of pre-Mughal Indian art, find their place with faces in profile, elongated eyes, deep lines, thin shading human figures engaged in a variety of actions, more defined trees and crowded animation (Pl. VII). The depiction of architecture and landscape remain identical with the Persian *qalam*. Various traditions of the latter—e.g., aerial perspective, the art of representing hills, the setting of objects, the depiction of architectural designs and the interlaced floral motifs—survived in Mughal art throughout the sixteenth century.

The miniature paintings of the *Razm*, State Museum Jaipur (hereafter Jaipur) the *Tā'rīkh*, Oriental Public Library, Patna (hereafter Patna) the *Anwār*, Bharat Kala Bhavan, Varanasi (hereafter Varanasi) and the *Bāb* National Museum Delhi, (hereafter Delhi) form the second group of Akbari illustrations. Most of the illustrated manuscripts belong to the period ranging from 1580 to 1600. The *Akb* miniatures come in the last group. Only three copies of the *Razm*, illustrated by the painters of Akbar's court are known to exist in Jaipur, the Baroda State Museum (hereafter Baroda) and the BM. It is a Persian abridgement of the *Mahā*. Badā'ūnī mentions that the learned Hindūs[13] were engaged in writing an explanation of the *Mahā* to assist Persian translators. He further writes that Akbar himself explained a few passages to Nāqib Khān, a translator. Abu'l Fazl clearly states that the translation was made from Hindi into Persian.[14] The translation was taken up by Nāqib Khān, Badā'ūnī and Shaikh Sulṭān of Thāneswar.[15] Abu'l Fazl wrote an introduction to

[13]Lowe, *op. cit.*, II, p. 330.
[14]Blochmann, *op. cit.*, p. 110-11.
[15]*Ibid.*

it.[16] In all, it contained nearly one lakh verses. The work was completed in AH 990 (AD 1582-1583).[17] We are told that Sulṭān Hājī took four years to complete the translation assigned to him.[18] Keeping in view this account, the date of its commencement may be accepted as around 1575.

The present copy of Jaipur contains 169 miniatures. Out of them, 147 have been published in the fourth volume of the *Memorials of the Jeypore Exhibition* (1883). The manuscript opens with a preface by Abu'l Faẕl, dated AH 995 (AD 1588). Keeping this in view, the miniatures of the copy should be dated 1590, but this is not the case. The present manuscript contains the miniatures executed by the painter Daswant who died in 1584.[19] It indicates that the work of illustrating this copy had started earlier, i.e., immediately after the completion of the Persian translation of the *Mahā* in 1582-1583. It seems that the preface dated 1588 was introduced later. For our purpose, the miniatures of this manuscript may be dated 1583-1585. The last leaf of the manuscript bears the impressions of eleven seals, of which five could not be read. The remaining six are:

1 Muhibb-i 'Alī, Banda-i Akbar S̲h̲āh
2 Ṣādiqaullāh K̲h̲an, Banda-i S̲h̲āh Jahān
3 Arshad K̲h̲ān; K̲h̲āna-zād S̲h̲āh 'Ālam Pādshāh G̲h̲āzī
4 Arshad K̲h̲ān K̲h̲āna-zād S̲h̲āh 'Ālam Pādshāh Ghāzī
5 'Abdul Haq bin Qāsim S̲h̲īrāzī
6 Faṭhullāh bin 'Abdul Faṭh

These indicate that this copy was lodged in the libraries of the nobles in the reign of Akbar, S̲h̲āh Jahān and S̲h̲āh 'Ālam. The earliest *'arz-dīdā* is on the right-hand corner at the bottom over the seal of Muhibb-i 'Alī. It is dated AH 1003 (AD 1594). The latest, the seal of Arshad K̲h̲ān, a servant of Emperor S̲h̲āh 'Ālam, is dated AH 1119 (AD 1708).

Apart from the one-page illustrations, there are a few on double-pages. These illustrations display the names of 46 painters, who cover the list given by Abu'l Faẕl in the *Ā'in*[20] with the exception of Mīr Saiyid 'Alī, K̲h̲wāja 'Abdu'ṣ-Ṣamad and Haribās. Thirty-eight paintings display a single name, while 99 plates are the examples of joint work which include two names. Only in one instance (Pl. 114), three artists worked together. The miniatures are mainly the work of three leading artists,[21] i.e. Daswant,

[16] Lowe, *op. cit.*, p. 331.
[17] *Ibid.*, pp. 329-331.
[18] *Ibid.*, III, p. 173.
[19] *Akbarnāma*, tr. Beveridge, III, p. 651.
[20] Hendley, "*The Razmnamah Manuscript*," *Memorials of the Jeypore Exhibition*; Blochmann, *op. cit.*, p. 114.
[21] Daswant : pls. 6, 9, 12, 14, 24, 32, 33, 43, 47, 48, 54, 62, 63, 67, 68, 69, 70, 71, 73 74, 88, 100, 108, (23 miniatures) ; Basāwan: pls. 7, 10, 12, 14, 21, 22, 34, 39, 40, 50, 53, 59, 64, 65, 70, 76, 81, 84, 106, 112, 113, 115, 117, 120, 121, 122, 126, 127, 130, 145 (30 miniatures) : Lāl ; pls. 4, 5, 8, 16, 23, 35, 41, 46, 51, 52, 55, 66, 75, 77, 79, 82, 83, 87, 89, 93, 109, 110, 111, 114, 116, 119, 123, 124, 125, 144 (30 miniatures).

Basāwan and Lāl. In most cases, they were assisted by side-artists who completed the work of colouring, etc. Crowded animation, the loss of effect due to the introduction of so many objects, confused compositions, elaborate scenes, vitality in figures and a sumptuous array of colours are the main characteristics of these illustrations. Miniatures given in the name of Daswant and Basāwan excel others in the depiction of the minute details and rhythm in the human and animal form. In the representation of draperies, flowing costumes, clouds etc., the lines have become deep and the shades vary. Landscape, too, has changed from the early examples of Mughal art. The traces of western art are casually indicated as in the deep shading, westernized drapery folds and aerial perspective.

The copy of the Baroda State Museum (hereafter Baroda) is of a notably inferior quality. The representation of minute details, the finish and decoration and the casual drawing of human figures show lack of skill. However, the chief canons of painting which characterize the Mughal miniatures are clearly observed as having been followed. Obviously, such copies were prepared to meet the demand of the nobility and the less exalted officials. The Baroda manuscript is far from complete. It contains only 32 scattered, loosened sheets displaying miniatures. From the contents of these folios neither the name of the scribe nor the place where the copy was composed is traceable. It is written in *nasta'līq* on buff-shade paper in black ink. The paintings display the names of 19 artists,[22] a few of whom are popularly known for their work on other manuscripts of Akbar's court. From the date of the colophon it is difficult to ascertain the location of the manuscript. The colophon may be dated, from pl. 31, as AH 1007 (AD 1598). Obviously, by this time, the Mughal *qalam* had imbibed various traits of European art. The figures of angels painted by Aḥmad Kashmīrī on pls. 19-20 *Razm* (Baroda) are directly derived from western examples.

The manuscript preserved at Patna, known as the *Tā'rīkh* is far from complete. It is mutilated at both ends. It opens with the account of Timūr's march in search of Amīr Ḥasan (f. 7) and abruptly ends after the account of Akbar's second campaign in Gujarāt in the eighteenth year of his reign, AH 980 (AD 1573). The name of the author and the title of his work are not given in the text. A thorough examination of the text reveals that it deals with the history of Timūr and his successor in Irān, and of Bābur, Humāyūn and Akbar—and has thus been named.

The colophon of the manuscript is missing, but the date may be fixed after the completion of the *Razm* (Jaipur). The first miniature on f. 2 in this manuscript is contributed by Daswant assisted by Jagjīwan *kalān* (the elder). Keeping in view the date of Daswant's death, which has already been described, the miniatures of this manuscript may be dated 1584-1586,

[22]Cf. Gangoly, *Critical Catalogue of Miniature Paintings in the Baroda Museum.*

as the remaining 131 illustrations must have taken a few more years to complete.

The present copy belonged to the imperial library of the Mughals. However, it has become difficult to ascertain its subsequent history from the date of its completion. The first flyleaf bears seven seals. One seal on the extreme top on the right side is that of Shāh 'Ālam Bakhshī Muḥammad 'Alī, and the second is a little below it and it belongs to Emperor Shāh Jahān. Besides the seal, there are several *'arz-dīda*. The second flyleaf bears an autograph of Shah Jahān. In all, there are 338 folios and 132 illustrations, of which 16 are double-page illustrations. It is the work of no less than 70 painters.[23] Basāwan and Lāl were the main artists[24] who worked on a larger number of paintings. In most cases, they were assisted by other artists.

The majority of the illustrations depict military expeditions, court scenes in and outside the palace and festivities accompanied with musical parties. Rarely do we come across hunting scenes as in folios 40 and 331. Crowded animation and the superimposition of figures are their chief characteristics. In these paintings one can observe the tendency to get away from the strict conventions of Persian art. The contours of hills have become simpler, and sometimes the rocks are drawn in a single stroke so as to depict one elongated curve, a traditional feature of Indian art. The distant background of the paintings varies greatly with the introduction of deep, shaded, floating clouds in the sky and the massed clumps of trees and buildings drawn in diagonal perspective. These were directly drawn from western art, but the manner in which the European perspective is rendered seems to have been followed without always being correctly understood. Basāwan, Farrukh *kalān*, Kesū, Madhū *khwrd* and Chetrā have shown greater interest in the western technique of picture-making.

Legendary books provided greater opportunities for the artist who could utilize his imagination more fruitfully and provide the central theme with a suitable background. Among such illustrated books, the manuscript of the *Anwār* is one of the best. Three illustrated copies of it are known to exist. These are preserved at Varanasi, SOAS, and the BM (BM Add. 18,579) respectively. The last copy was finished during the reign of Jahāngīr, though the work of illustration was started towards the end of Akbar's reign.[25] The colophon of the manuscript is dated AH 1019 (AD 1610-1611). Two out of 36 paintings of this are dated six years earlier than AH 1019. This shows that the work was projected long before during the time of Akbar.

The *Anwār* Varanasi contains 239 folios. The manuscript contains a

[23]See Appendix 1.

[24]Basāwan : ff. 4, 6, 7, 9, 16, 17, 30, 53, 54, 57, 58, 61 and 62. Lāl : *Tā'rīkh*, ff. 22, 23, 44, 60, 63, 66 and 97 (Patna).

[25]All the miniatures of this ms. are reproduced in colour in J.V.S. Wilkinson, *The Lights of Canopus.*

pictorial colophon dated AH 1005 (AD 1596-1597). The painting on folio 242, by Anant has an inscription that says the copy was scribed by 'Abdur Raḥmān-al Haravī at Lāhore. The miniature also represents the scribe with his helper. The tradition of pictorial colophon is observed only casually in the Mughal manuscripts. In another instance, the *Gulistān*, RAS, contains an illustration, representing the scribe and an artist-painter of the folio. Yet another parallel example exists in the *K͟hamsaN* of 1596 (now in BM, OR. 12,208).

The Varanasi manuscript contains 26 illustrations which give the name of 15 artists.[26] The first painting, which is a double-page illustration, differs in style from the rest of the paintings. Its style is Persian. The costumes, utensils and musical instruments depicted in the painting all belong to Persia. It does not bear the name of the artist. It should be studied with the Persian miniatures and it seems to have been inserted in the present manuscript. Other illustrations generally cover a full page. Only two paintings are on a half page. Here again, the location of the manuscript is not clear. Probably, it was preserved in the Imperial Library, Delhi. Mahārāja Digvijaya Singh brought this copy to Balrampur in 1858 from the Oudh State Library, Lucknow (hereafter OSL). It was gifted in 1958 to Dr Bhagwati Prasad, who sold it to the Varanasi Museum.

By this time, the painters had established their originality in style which became more evident as time went on. In the present work, Farruk͟h *Chela*[27] and Miskīn[28] may be noted for their originality. The former shows an inclination for off-shades of violet, pink and blue and for slithering shapes (Pl. VIII). The work of Miskīn is distinguished by the rhythmic figures represented in varying postures and harmonious colour schemes. An unsigned painting on f. 233, "gold coins from the belly of an ox," is unique in its treatment of pigment. The picture is completed in gradations of a single colour, and the objects employed to expand the theme have been submerged in the background. Miniatures contributed by Mukund and Manohar may be noted for a better understanding of western techniques of painting especially where they have preferred a diagonal view of the buildings, heavy modelling, thick shaded lines, heavy folded drapery and greatly diminished distant landscape.[29] The lady represented by Manohar on folio 100, clad in a white sheet with folded hands is reminiscent of drawings of the Virgin Mary in European art.

The illustrated chronicles have proved of greater interest. Of them, the miniatures of *Bāb* have attracted the attention of scholars of history. It may be considered the richest collection of Akbari art, as today it has the greatest number of surviving copies. The original memoir was written in Chagatāi-Turkish. A single extant copy of the Turkish text is now

[26]Anant, Basāwan, Dharamdās, Farruk͟h *Chela*, Jagannāth, Lachhman, Lāl, Madhū, Mahesh, Manohar, Miskīn, Mukund, Nand Gawalyārī, Sānwalā and Shankar.

[27]*Anwār*, f. 30 (Varanasi).

[28]*Anwār*, ff. 48, 71, 190 (Varanasi).

[29]*Anwār*, ff. 42, 100, 178 (Varanasi).

preserved in the Salarjung Museum, Hyderabad (hereafter Salarjung). This was transcribed during Aurangzeb's reign[30] and was consulted by A.S. Beveridge for translation into English.[31] Of the several translations of Bābur's memoirs into Persian, that by 'Abdur Raḥīm Khān Khānān is the best known. It was presented finally to Akbar in 1590.[32] In 1583, however, one Pāiyanda Ḥasan of Ghazna and Muḥammad Qulī of Hissār, had taken up the work of translation privately. These were not completed and the originals are extant in the BM, and in the Bodleian Library (hereafter BL) respectively.[33] The great variety of themes and the imaginative rendering of events in the *Bāb* offer a wide scope for the painter to draw his subjects. Of the several manuscripts illustrated at Akbar's court, only five are known to exist. These are preserved in Delhi, the BM, the State Museum of Oriental Cultures, Moscow (hereafter Moscow), the Victoria and Albert Museum, London (hereafter VA) and the Louvre, Paris (hereafter Louvre). The last three are incomplete collections. A single painting, representing a bird-trapper at work, is in the Fogg Art Museum, Boston (hereafter Fogg).

The Delhi manuscript (Delhi 50.326) is a collection of 378 loose folios and bears no library mark. In all, it contains 145 paintings, of which only 54 bear the names of 40 artists.[34] As many as 55 paintings are unascribed, whereas the rest have either illegible inscriptions or have been half eliminated in the process of trimming. Folio 116 bears a valuable note, declaring that the paintings on it were completed in the forty-second regnal year which is equivalent to 1598.[35] The BM manuscript (OR. 3714) contains 118 painted folios, bearing the names of 54 artists.[36] Ninety-six of these folios have been published in colour in an enlarged size of 26 × 16 or 15 cm.[37] Their *ḥāshiyas* are done in beautiful running floral patterns. The Moscow manuscript is unfortunately incomplete and contains only 69 paintings. All these were published by the State Fine Arts Publishing House, Moscow, in 1960. There are 18 colour plates in it, the rest are in black and white. These are all in flush cut and do not bear the names of the artists.

A number of themes are common to all three manuscripts. There is, however, a difference of opinion among modern scholars with regard to the date of the manuscript in the BM. Without giving any reasons, however, Vincent A. Smith determined 1600 as the most likely year.[38] Motichandra[39] fixes 1561, whereas Percy Brown regards 1575, as the

[30] *Bāburnāma* tr. A.S. Beveridge, I, pp. xii, xi, vi.
[31] *Ibid.*, p. xxvii.
[32] H. Beveridge, *op. cit.*, III, p. 862.
[33] A.S. Beveridge, *op. cit.*, pp. xiv-xv.
[34] See Appendix 1.
[35] Folio 116 represents the twenty-fourth picture painted by Khem Karan.
[36] See Appendix 1.
[37] Hamid Suleiman, *Miniatures of Baburnama.*
[38] Smith, *A History of Fine Art in India and Ceylon*, p. 192.
[39] Motichandra, *The Technique of Mughal Painting*, p. 91.

probable year.[40] All these scholars, however, agree that it was illustrated during the reign of Akbar. As we know, the earliest translation of the *Bāb* was made in 1583, therefore the dates given by Motichandra and Brown are irrelevant. We also know that Khān Khānān presented his translation to the Emperor in 1590. Placing this fact along with the date, 1598, given in the Delhi manuscript, it should not be difficult to guess that the Emperor was delighted at the work, and at once ordered it to be illustrated—a task which, considering the number of paintings, the slow, careful work and other factors involved, could normally have taken a few years to complete.

That the three manuscripts under consideration belong to the same period (1590 to 1600) is shown by the fact that there are strong technical and stylistic similarities between them. The themes selected are mostly the same. No less than 12 common artists worked on the folios of these manuscripts. The texts of the blurbs, which are in Persian, are generally the same. This should prove sufficiently that the manuscripts had a common origin in time and place. The date of the Delhi manuscript is, therefore, applicable to the other manuscripts too. Incidentally, f. 116, bearing the date 1598, was not necessarily the last to be painted and we may safely extend the time of the completion of the entire work to 1600.

The paintings contained in the Moscow manuscript are of a notably inferior quality to those of the other two manuscripts. The representation of the human figure specially shows lack of skill;[41] and the same is true with regard to more minute details, finish, decoration and drawing. However, the chief canons of painting which characterize the BM and the Delhi collections are clearly observed as having been followed. It has been a practice that when several illustrations of a single theme were required to be painted, the work was distributed among the artists according to the degree of their skill. Those intended for royal use must have been done entirely by the best artists. Some were made by their pupils who, having worked upon the paintings under expert guidance, submitted them to their superiors for correcting, retouching and finalizing. Obviously, these copies were presented to those of lower ranks among the nobility.

The *Bāb* paintings are examples of a less elaborate background. In the Delhi manuscript, the compositions, the ornamentation of objects and the representation of the landscape are simpler than those in the BM copy, whereas the Moscow copy is comparatively simple. The western tendencies of picture-making can be traced in the westernized folds of draperies.[42] Interestingly, the depiction of a European boy on pl. 27 in the Moscow copy seems to have been introduced without any valid reason. Among

[40]Brown *Inidan Painting under the Mughals*, p. 113.

[41]*Bāb*, pls. 2, 10, 19, 21, 23, 65, 68, 69 (Moscow).

[42]For the reproductions of the miniatures of Moscow Ms. see Tyulayev, *Miniatures of Baburnamah.*

the leading painters of the *Bāb* Daulat, Kesū, Khemkaran, Farrukh, Jagannāth, Manohar, Manṣūr, Miskīn, Mahesh, Sānwalā and Shankar may be noted. Many of them were recognized by Abu'l Fażl and later attained fame.

The illustrations of the *Akb* form the last group of the miniatures painted at Akbar's court. Only three copies of the *Akb* are known to exist at present at CB, the VA and the Gulistan Library, Tehran (hereafter Gulistan).

The copy in the CB was purchased from Quaritch in 1923. Probably this is one of the volumes carried off to Persia by Nādir Shāh from the Royal Library of Delhi.[43] The name of the scribe and the place where it was composed are not known. The colophon of the manuscript is missing. The present copy contains 268 folios, including 61 miniatures. The themes are executed generally on a full page. Fourteen illustrations are on a double page. The paintings give the names of 20 artists.[44] Only two paintings bear more than one name.

The manuscript in the VA has survived in a good condition, though mutilated towards its end. It contains 461 folios and bears an autograph of Emperor Jahāngīr. The colophon of the copy is missing. Most probably, it was finished towards the last years of Akbar's reign and the date of its completion may be taken as about 1600. The miniatures are mostly full-page and a few are double-page illustrations. Margins are left plain. These miniatures bear the names of 53 painters.[45] Like illustrations of the *Razm* (Jaipur), and the *Tā'rīkh*, Patna, miniatures of the *Akb* are mostly the creation of groups of artists. Only in two instances (pls. 1 and 114) do we come across four names of painters who accomplished the work of *ṭarḥ* (sketching), *'amal* (colouring), *chihranāmī* (face drawing) and *sūrat* (figures).

The autograph of Jahāngīr shows that this manuscript was placed in the library by him on his accession in 1605. This fact leads one to presume that this copy was probably in the personal care of Jahāngīr from the time of his princehood. Brown is of the opinion that the present copy was prepared by artists of ordinary talent and hence is difficult to regard as a work of the Akbarī school.[46] We come across several names of the leading artists, viz. Basāwan, Lāl, Madhu, Kesū, Mahesh, Miskīn, Khemkaran, Kānhā, Sānwalā, Jagan, Farrukh Beg, Mukund and Shankar, who have contributed their masterpieces to the *Akb* (VA). Many of them have been reckoned by Abu'l Fażl, and are widely known for their works in the *Razm* (Jaipur), *Tā'rīkh* (Patna), *Anwār* (Varanasi) and the *Bāb* (BM & Delhi). Basāwan, Lāl and Miskīn are the

[43]Arnold and J.V.S. Wilkinson, *The Library of A. Chester Beatty, A Catalogue of the Indian Miniatures*, I, p. 5.

[44]*Ibid.*, pp. 4-12, II, pl. VI-XXXVII.

[45]See Appendix 1.

[46]Brown, *op. cit.*, pp. 118-19.

main artists who contributed most of the miniatures to these memorable works of art.[47] Their works hardly leave any doubt as to their excellent draftsmanship, accuracy of line, form, etc., represented in the miniatures, and in accepting them as the celebrated production of the royal *kārkhāna*. However, it must be conceded that the individualities of the painters have been lost in most cases. The reason for such a loss may well be understood. Under the system of combined work, two or more artists worked on one miniature and accomplished the tasks of *tarh*, *'amal*, *chihrānāmī*, etc., separately. In this system, the skill of the painter should have tended towards delimitation, but the talent of one artist depended on that of another; and consequently, the individuality of one artist either merged into that of another or superseded it. A good painter could produce better creations only when a talented artist joined him. It would not be out of place to mention that Farrukh Beg's style is quite distinct in pls. 96 and 117 *Akb* (VA), on which he worked independently. The same is true about Farrukh *Chela*, but when assisted by a side painter, e.g., Mukund, Surjan, Narain Dhanraj, the individualities of the two fused together.[48] Thus, individualities fused in the interest of common features, and this is equally true of the miniatures of *Razm* (Jaipur), and of *Tā'rīkh* (Patna), in particular, and for other instances of joint work, in general.

The illustrations in the *Akb* (VA) indicate a break in the significant relation of painting and written text, a tradition borrowed from the Persian art of illustrating books. Most of the illustrations of the *Akb* are unbroken by the text and wherever it does find a place, it remains insignificant. It appears more Indian in feeling. The compositions are more complex, crowded and animated. Miskīn has greatly favoured such compositions. The building of the Red Fort at Agra (pl. 45) and the execution of Khān Zamān's followers (pl. 90) may be noted (pl. LXXVI). Both are the examples of diagonal composition, the latter containing vigorous action. The "Reception of the ambassador of Shāh Rukh," is his outstanding work. Here, the human figures dominate and the atmosphere plays a vital role. In pl. 72, Miskīn has preferred a diagonal composition to depict a cannon hauled by oxen up a hill. He has rivalled Basāwan who used the same technique to represent Akbar controlling a raging elephant (pl. 22). *Akb* miniatures are characterized by realistic representation of human figures and landscape. Lāl and Madhū are other painters of repute in this period.

Generally, the paintings of the CB manuscript go together with the *Akb* (VA). However, the former is comparatively simple in composition and less decorative. Another fragmentary copy of *Akb* preserved in the

[47]Basāwan : pls. 17, 18, 21, 22, 24, 50, 61, 62, 81; Lāl: pls. 27, 28, 32, 42, 43, 44, 54, 76, 92, 102, 106, 107, 108, 109 ; Miskīn : pls. 23, 45, 52, 66, 67, 72, 74, 87, 88, 90, 98, 100, 114 (*Akb*,VA).

[48]Independant works of Farukh *Chela* : *Dīwān*, ff. 116, 177 (Rampur); *Anwār*, f. 30 (Varanasi); *KhamsaN*, f. 123 (BM). For his joint works, see *Tā'rīkh*, ff. 101, 108 (Patna); *KhamsaN*, f. 65 (BM).

Gulistan contains 12 miniatures. These are distinguished by a cool and harmonious colouring and a palette different from Akbari painters, thereby indicating that the manuscript belonged to a later period.

Several artists were employed at the Court to paint the great treasure of Mughal miniatures. Abu'l Faẓl has given a brief list of only 17 artists possibly owing to want of space.[49] He, however, reckons that more than a hundred painters had attained fame.[50] Hundreds of painters worked at the imperial *kārkhāna*. After a survey of the Mughal miniatures, under our limited means, 225 names of artists[51] have been noted. There might have been more. The artists belonged to different places. Among the artists, the Hindus were in a greater number. People from the lower castes—*kahār* etc.,—were also raised to the status of a royal artist. It was the keen eye of the Emperor which saw the potential talent in Daswant, the son of a *pālkī*-bearer.[52] He was handed over to Khwāja 'Abdu'ṣ-Ṣamad. Soon Daswant surpassed his contemporaries. Besides the painters, design-artists, gilders, line-drawers and pagers were also employed in the *kārkhāna*.[53]

The *kārkhāna* was completely organized with *dāroghas* and clerks. The former laid the work of painters before Akbar who conferred awards upon them according to the excellence of their workmanship. Further to develop the art of painting, he made the materials of painting easily available by ordering them to be sold at reasonable rates. Artists were paid monthly salaries. Abu'l Faẓl has mentioned that many *mansabdārs*, *aḥadīs* and other soldiers[54] were appointed in this department. It seems that under Akbar, no distinction was made between civil and military employees and the civil servants were paid according to the military ranks bestowed upon them. Consequently, the painters were given the rank of the *mansabdārs* and *aḥadīs* and were paid accordingly and the pagers, line-drawers, etc., held the status of an ordinary soldier. The *Ā'in* refers to the salary paid to a foot-soldier.[55] It varied from 600 to 1200 *dāms*, which may be taken to be the lowest pay of a worker in the *kārkhāna* for painting.

Abu'l Faẓl has specially praised the work of the Hindu artists. He says "Their pictures surpass our conception of things. Few, indeed, in the whole world are found equal to them." The Hindu painters laid much emphasis on the representation of human character.[56] Basāwan was a rival of Daswant and has been referred to in the *Ā'in* just after him. Abu'l Faẓl mentions that a few critics preferred Basāwan. He excelled in the painting of backgrounds, the drawing of features, the distribu-

[49]Blochmann, *op. cit.*, p. 114.
[50]*Ibid.*
[51]See Appendix 1.
[52]Blochmann, *op. cit.*, p. 114.
[53]*Ibid.*, p. 115.
[54]*Ibid.*
[55]*Ibid.*
[56]Binyon and Arnold, *op. cit.*, p. 45.

tion of colours and portraiture.[57] The *Razm* (Jaipur) miniatures are the examples of the contemporary nature of the works of both Daswant and Basāwan. They seem to be inspired by the Persian, Indian and European trends. Basāwan shows greater inclination for profuse decoration in the scenes, heavy folds in the flowing costumes and a thick shade which appear occasionally in Daswant's miniatures—though his works represent a greater sense of depth, and the background is mostly drawn with a hazy landscape. Elements of Jain art are also not wanting in the work of the latter. On pl. 71 the conical ends of the costume depicted in the central figure are reminiscent of the Jain style.

Basāwan[58] has left a greater number of pictures in various illustrated manuscripts, e.g., the *Anwār*, *Razm* (Jaipur), *Tā'rīkh* (Patna), *Akb* (VA), *Dārāb* (BM) and *Bāb* (VA). The greatest collection of his works has survived in the *Razm*, *Tā'rīkh* and *Akb*. The degree of vitality in the representation of human figures, the violent action equally reported in the human and animal figures and the rhythmic lines depicted in the art of Basāwan are hardly observed in the creations of Daswant and other painters of the court. A few of his creations are superb for the display of the involvement of each part of the body and the whole action has been executed in a violent rhythm.

The Akbari illustrations are representative of the excellence of later sixteenth-century Mughal art. Here, an attempt has been made towards a more extensive study of the art produced under Akbar. A good deal of work has been done in appreciation of Mughal art recently and after the scholarship of renowned people like Brown, Smith, L. Binyon, Blochet, Motichandra, Promod Chandra, Rai Krishna Das, Douglas Barrett, Gray, L. Hajek, W.G. Archer, E.B. Havell. G. Solomon, A.K. Coomarswamy, J.V S. Wilkinson, etc., hardly any scope is left for fresh exploration. Nevertheless, the wealth of information on material culture which these paintings have to offer could be fruitfully tapped.

Whereas the greater mass of textual and archaeological source-material available enables us to reconstruct a plausible picture of the political and social life in Medieval India, the cultural history of the period remains largely unexplored for the want of adequate source of information. Official chronicles and other historical accounts concern themselves with this aspect only to the extent of giving biographical notes or at the most in dealing with the fine arts, especially poetry. Princes and kings are

[57]Blochmann, *op. cit.*, p. 114.

[58]Basāwan : *Razm*, pls. 7, 10, 12, 14, 21, 22, 34, 39, 40, 50, 53, 54, 64, 65, 70, 76, 81, 84, 106, 112, 113, 115, 117, 120, 121, 122, 126, 127, 130, 145 (Jaipur) ; *Tā'rīkh*, ff. 4, 6, 7, 8, 9, 16, 17, 30, 53, 54, 57, 61, 62 (Patna) ; *Anwār*, f. 5 (Varanasi); *Akb*, pls. 17, 18, 21, 22, 24, 50, 61, 62, 81 (VA). Alongside these pictures, his work may be seen on the folios of *Tutī*, *DīwānAn*, *Bahā*, (BL), and *Dārāb* (BM, OR 4615). It is quite passible that Basāwan was one of the illustrators of the *Hamzā*. Two miniatures attributed to Basāwan are preserved in Vienna, *Note Book Dastan-i Amir Hamzah* XI, (figures 4 and 27). (Cf. *Encyclopaedia of World Art*, *op. cit.*, II p. 385, 387.)

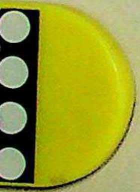
found at times giving casual accounts in their memoirs of experience involving the activities and aspirations of common people, but these are inadequate.

In the absence of textual evidences nothing can be of greater value than contemporary paintings for the purpose. More than any amount of words the visual experience acquired through this medium provides us in illustrated form with the knowledge of a variety of those things that a chronicler would never even think of as worthy of report. Fortunately, the Mughal period is the richest in this respect.

While turning over the leaves of the Mughal albums, one is struck by the persistent uniformity of the shape and form of articles of utility, cultural interest and institutions which, analyzed and put together, enable us to comprehend medieval life more intimately. It is true that the experience gained from these paintings remains for the most part limited to the life at court. Yet they are representative to a certain degree of the level of medieval culture. Nor are the Mughal miniatures, on the whole, or even those of the time of Akbar, entirely bereft of the representations of the lower sections of society, the middle-class men, the cultivators, the artisans, the traders, the saints, the entertainers, the jugglers, etc. In fact, the illustrations of the well-known *dāstāns* are extensive stores of information relating to the life of the common man. To these books, the artist was indebted insofar as he drew action for a seal. The depiction was entirely a different matter and here he turns for inspiration to his own present experience. The author has given graphic description of the lives of the people as he happened to observe in various miniatures. Some of these have been illustrated through miniatures and sketches in line drawing. The shepherd, the culrivator, the dancing-girl, the musician the trader, the saint, the wood-cutter, the washerman, the mason and labourer, the water-carrier, the fisherman, the bird-trapper, the boatman, the royal attendants and the village girls—all form part of the paintings. The fauna and flora of India are also depicted. The illustrations of the *Bāb*, display numerous birds, animals and plants. For their representation among the various Akbari manuscripts, the *Bāb*, (specially Delhi and the BM) may be taken as the richest collections. The illustrations help us to know about the utensils, musical instruments, technological devices, costumes, arms, armour, ensigns, etc., used in those times. These are records which the historian of the medieval society can ill afford to bypass. But for this purpose, detailed studies need to be taken up. The miniatures have to be studied piece by piece and line by line. The forms have to be compared and the information has to be pieced together for obtaining authentic information. The present work is only a humble attempt in this direction. The author is aware of his limitations regarding accessibility to sources.

The work is broadly divided into two parts dealing with the art and technique, on the one hand, and the historical aspects, on the other. The first part is concerned much less with the aesthetic aspect. Although enough

work has already been done in this direction, the appreciation of art may vary according to changing aesthetic values and individual taste. Attention therefore, has been paid to the techniques involved in the art of drawing, the expansion of the Mughal *qalam* and its contribution to Indian art, the traces of the synthesis of the Persian, Indian, European and Chinese traditions, the perspective, colouring, light, shade, etc. A separate chapter is devoted to the treatment of themes. The decorative patterns and designs form the subject of a distinct section. The second part is more analytical. It deals with the different kinds of cloth, garments and other apparel, such as head-gear, *jāma*, *farjī*, *peshwāz*, *gadar* as well as ornaments. Arms, armour, musical instruments played on the occasion of feasts and festivities and on the battlefields, the instruments of the *naqārkhāna*, ensigns of royalty, various articles of utility, kitchen utensils, the implements of gardening and agriculture, the tools of a mason, carpenter, etc., the means of irrigation, the means of transportation, astronomical objects and a few other technological devices, have been separately treated and illustrated through sketches.



list of plates

glossary

Aḥadī	Cavalry trooper in imperial establishment
'Amal	Work : used here specially for the execution of painting; colouring
'Arz-dīda	Record, office note
Chārdīwārī	Outer walls of a house, boundary ; used here specially in the sense of *qanāt*
Chihranāmī	Portrait
Chela	(Literally, disciple) Slave in imperial establishment, thence servant
Dām	Copper coin
Dārogha	Superintendent
Dīwān	Collection of poems
Dastarkhwān	Sheet of cloth on which food was served
Girih	Sixteenth part of a yard (*gaz*)
Ḥaram	Harem
Ḥāshiya	Border, margin
Kārkhāna	Workshop
Kahār	Palanquin bearer, also a caste
Khaṭ	Line, writing
Kalān	Big, senior viz. Madhu Kalān
Khwurd	Small, junior viz, Madhu Khwurd
Mansabdār	Holder of a rank (*mansab*)
Nasta'līq	Mode of writing Persian with rounded letters
Naqārkhāna	(Literally kettle-drum house) Usually an open chamber at gates of palaces and forts. A band of cattle-drummers and pipers
Naqshanavīs	Inker of margin (*ḥāshiya*)
Naqqāsh	A stone-cutter, an engraver
Pālkī	Palanquin
Qalam	Pen ; style
Qamargha	Method of hunting with a circle of drum-beaters
Qanāt	Curtain-wall of a tent
Qaṣīda	Panegyric in verse

Rang-āmezī	Colour-mixing
Ṣandali	Foot stool, foot rest, usually placed below the throne.
Shāmyāna	Large tent supported on poles
Ṣūrat	Figure
Tarḥ	Sketch, drawing, outline
Ṭaswīr	Picture, miniature
Waṣlī	Mount prepared by pasting together two or three or more papers for painting thereon
Waslīgar	*Waṣlī*-maker

contents

1 style and technique

The artists of Akbar's Court were drawn from within the country, and also from Iran. Naturally, the style that developed was eclectic, drawing the best of the Schools of Bihzād and pre-Mughal Indian arts. At the same time, there is a painstaking effort to break away from the Persian and contemporary regional styles, a fact especially observed in animal figures, portraiture and landscape. The Mughal art of painting may well be understood in the light of Abu'l Fazl's definition: "Drawing the likeness of anything is called *taswīr*."[1] An artist's skill seems to have been ascertained by his ability to represent realistically. Abu'l Fazl suggests further standards for evaluating the best executions.[2] Basically, these included the depiction of minutest details, boldness of expression, frankness of lines, the truthful representation of form and colour, and lastly, the general finish. It combined the skills of laying the pigments, shading, and lining and ornamenting the objects. These very standards are the basic elements which shaped the style of miniature-painting under the Mughals. There is a marked propensity towards naturalistic representation, though the measure of success is largely determined by the artist's association with his respective school as well as by the commonly accepted conventions. Thus, the Persian tradition makes itself emphatically felt in the aerial perspective, deep blue skies, flat in tone, occasionally sprayed with a flight of birds or stars; in the simultaneity of vision; bird's-eye view; hills with a river or a stream, birds and animals shown perched on them; trees laden with flowers; figures imposed on one another; a group of figures over a landscape background; the representation of objects following a continuously rising viewpoint; the method of dividing up the picture plane into small spaces; bright colours; elaborate embellishment of costumes; curvilinear forms and interlacing scroll work in designing; the lavish use of gold pigment and Persian blue and crimson. A Mughal artist drew inspiration from the Iranian stylistic peculiarities accompanied by a very modest Indian tinge on the whole.

[1] *Ā'in-i Akbarī*, tr. Blochmann, I, p. 113.

[2] "The miniatures in detail, the general finish, the boldness of execution, now observed in pictures, are incomparable; even inanimate objects look as if they had life." *Ibid.*, pp. 113-114.

The greater number of Hindūs among the painters at the court of Akbar should have resulted in an increasing Indianization of Mughal art. The typical gestures of hands, faces with elongated eyes, the long, straight tree-trunks, the dense foliage of trees, the stylized forms of leaves, mounds of earth, water shown by zigzag lines in a white pigment on a grey surface, with or without foam, a fish or two generally submerged in the water or half above it, the water surface covered with lotus flowers and leaves, crowded animation, hierarchical perspective, round lines and rhythmic figures of animals, especially the elephant—all these remind us of various native styles of art.

The earliest example[3] of the fusion of Persian and Indian styles appears in the illustrated pages of the *Ni'āmatnāma*,[4] a cookery book *c.* 1500 written at the court of the Muslim ruler of Malwa.

Various objects related to the Indian scene, though represented in a Persian style, gradually disclose a marked Indian influence. The method of shading employed is similar to that in Ajantā paintings, though the European technique also begins to show with deep and thick shading. Mughal art during Akbar's time experienced the influence of European art, the most significant of which is the introduction of perspective. The artists realized the importance of the background and aerial perspective to enliven the scene and broaden the canvas. The narrow strip of flat sky painted in a plain blue or gold pigment is replaced by a background of towns, castles, open fields, rivers, a hunting scene, distant hills and trees or a shepherd or a farmer shown at work. Sometimes the background consists of a larger expanse of sky with floating clouds in varying shades. European influence is also evident in the three-dimensional effect and the reduction of scale as the eye moves towards the horizon. The distant view of cities in diagonal perspective and massed clumps of trees are directly derived from western painting. The plastic roundness of form is represented by employing fine shaded lines and folds. The draperies, the flowing costumes of ladies, etc., are mostly painted with deep-shaded strokes. But the traces of these are few and far between. Attempts are also made to represent human beings in relief. However, the use of European perspective in miniatures was followed without being always correctly understood.[5] The methods remain more or less conventional and uniformity of scale is allowed to persist, irrespective of the distance.

The features of Chinese art become increasingly evident in the paintings. One of these was the practice of combining calligraphy with pictorial art, which came from China through Iran where it had become common with manuscript illustrations. The dragon, and some of the motifs with elongated flame-like ends are similarly of Chinese origin.

[3]Rawson, *Indian Painting*, pp. 104-105.
[4]*Ni'āmatnāma*, *c.* 1500, India Office Library, London.
[5]Ernest and Rose, *Miniatures of Musical Inspiration*, I, p. 22.

Apart from these, there is much in the paintings that is original, for instance, the depiction of violent action or the introduction of a variety of postures and moods in animal figures. There are in these illustrations a richness, a sense of variety and a vividness of experience which distinguish them from other contemporary arts and all these elements gradually seem to get synthesized into what has been called the real Mughal Art of the later period.

A fact mentioned by some authors[6] is that after the selection of paper, a few sheets were pasted one upon another to give a substantial thickness to the material for miniatures and portraits. The illustrations represented in different manuscripts were directly painted on single sheets and pasted on the folios of the manuscripts. This is understandable, as bound manuscripts could not accommodate thicker sheets without losing their shape on the open side. The paper was smoothed with rounded agate before the sketch was drawn.[7]

On this smooth surface, the artist sketched the theme. The primary sketch was drawn in soft lines, suggesting the outer forms of the figures. This rapid sketch was developed and correct lines were drawn over them with the accuracy of form. These lines were harder than the primary lines. To obliterate the wrong and superfluous lines, a thin coat of white pigment was laid on the sheet. The correct lines were redrawn in dark pigment with a fine brush. This done, the colours were applied to finish the painting. It is difficult to examine the pigment used in drawing the sketches, as the manuscripts under consideration contain no unfinished paintings. A few unfinished paintings can, however, be seen in the Moscow *Bāb*.[8] In these, the lines are quite visible and show up against the surfaces treated with the first coat of white pigment and in some instances against the next coat of the pigment used for the background. Evidently, the final sketch was drawn in dark pigment.

The pigment could be blended or laid flat on the paper. In the latter no consideration was given to tonality. Different or contrasting colours were used for distinguishing one from another. This technique is reminiscent of Persian paintings and indicates the primary state of using *tempera* colours. The *tempera* colours, as a matter of rule, are used thickly to form a layer on the paper. Pigments are painted one upon another when the base colour finally dries up. The process of shading, final linings and

[6]Cf. Hajek, *Indian Miniatures of the Mughal School*, p. 40; Brown, *Indian Painting—The Heritage of India*, p. 118.

[7]It is so evident from an illustration on f. 242 *Anwār* (Varanasi). The miniature represents a helper busy rubbing the paper with an agate, though for the use of calligraphy. This may also be taken as a process of preparing the ground for painting; Hajek, *ibid.*, p. 40; Brown, *ibid.*, pp. 13-14; Motichandra, *The Technique of Mughal Painting*, p. 38.

[8]See pl. 20 (a pair of birds in the foliage of a chinar-tree), pl. 25 (an outline of an animal figure in a pile of slaughtered animals) pl. 46 (two human figures at top centre) and pl. 56 (outline of a bird sitting on a hill-top on the left side of the painting).

lastly, the use of the gold pigment involves two to three or even more layers of pigments on a paper. The early illustrations of the Mughal artists, painted in flat colours, are two-dimensional in effect. With the introduction of the three dimensional technique, this treatment of colours was replaced by the blending of colours, though the former technique survived in its changing modes to the last.

As against this, the technique of blending colours is not found too frequently in the miniatures. It would emerge only in the treatment of a few subjects, viz. the sky, hills, tree-trunk, foliage of a tree, and rarely in the objects more frequently encountered in the foreground. In this technique, instead of treating a sketch with a first wash and laying the colours one on another, tonality, light and shade were directly defined in the first treatment producing a three-dimensional effect. This naturally involved a greater skill. Colour is used thinly in this technique. The technique of blending colours was first used for the sky and clouds and later for hills, trees, etc. This process, through the merging of one wet pigment with another produced new shades. The artists made only partial use of this technique in their work; we do not come across any illustration made totally in this manner.

There was another process known to the Mughals, though it was infrequently used. It involved, first, the thin wash of a tinge on the surface of the paper. The base, when dried up, was ready for the brush. Next, the outlines of the objects were drawn in colour to distinguish them from the background. Other colours to be filled in the various objects, e.g., costumes, utensils and buildings were obtained from the gradations, i e., tints or shades of the ground colour, and thus the painting was finished in a harmonized colour-scheme. The tree-trunk, its foliage, the sky, etc., remained submerged in the background. The artist sometimes used fine, shaded lines to represent the anatomy of the figures, the details of the objects and the fineness of the forms and, lastly, the three-dimensional effect. White pigment or some other pigment of light tone, slightly differing from the base, was used in the costumes, etc. The illustrations in this technique are quite distinct from others and are austere in appearance.

A few artists established their originality by handling colour in a different way. The treatment of the figures and the use of the pigments remained identical; only the method of presentation has varied. The illustration on f. 478 *Bāb* (BM) by the artist Dhanrāj is entirely in blue with a tinge of green. The objects, viz. the sky, the hillocks, the fort, the trees and the ground which build up the composition are represented in a harmony of these two colours. The figure of an emperor also appears to be dominated by these colours. His face is shown to have a dark complexion—a mixture of yellow and green with a tinge of blue—and the *jāma* in green culminates the effect of harmony. Other pigments, viz. yellow, crimson, orange and white, are also used, though sparsely, to distinguish between objects. The propensity for blue and green colours shown by Dhanrāj has survived in other illustrations painted by him, e.g., f. 305 *Bāb* (BM).

The most illustrious painting in this technique is in the *Anwār* (Varanasi) on f. 233. The whole scene—human figures, their costumes, the figure of an ox, the trunk of a tree, hills, water and the distant landscape comprising buildings—is dominated by one colour: chrome yellow with a tinge of brown. The details are also represented by employing a deeper shade of the same pigment. Shaded strokes directed to a side, suggest shadow and produce depth in the picture. The strokes drawn are bold and directed horizontally. This distinctive use of a single colour is indicative of the skill of the painter, whose name, unfortunately, does not appear on the folio.

The marked tendency of representing every minute detail, irrespective of the distance and the principle of maximum visibility, and lastly the love for decoration, was best suited to the pigments being laid flat. It provided an easy approach for introducing designs, and easily accommodated the gold pigment which was invariably laid flat. The floors, carpets, domes, costumes, arms and armours, utensils, etc., are represented with profuse decoration. As against this, the draperies, etc., are invariably plain. Similarly, the loose garments, viz. the *peshwāz* of the ladies, *'abā* of traders, etc., are left plain, though the folds and curves are distinctly displayed by employing shaded lines.

In the objects painted in flat colours, the three-dimensional effect is achieved by introducing shade. The shading of a figure is done in two stages. An original colour is spread on the surface first; then darker shades are applied. This can be done either on a dry or wet surface. In the first instance, the original pigment is allowed to dry and the shading is done through fine, small and close lines or sometimes through dots. These lines are drawn in different forms and angles, for instance, curved or straight, which may be laid diagonally, horizontally and vertically. In the miniatures, these are visibly drawn by the single strokes of a brush. It is obvious in the treatment of tree-trunks, hillocks, uneven grassy ground, animal figures and architectural designs. Strokes are drawn according to the modality of the object. Subsequently, the uniformity of the figure has survived to the last. The folds, knots, pits and bulges shown in tree-trunks; mounds of earth and the figures of elephants are the best examples of the strokes drawn in varying forms accommodating the natural shape of the object. Similarly, in pillars, shaded lines may be drawn in a circular form to enhance the effect of roundness.

In the second instance, the shading pigment is gradually mixed with the original pigment while still wet. The lines get diffused so as to leave no discernible traces of parting strokes between the light and the shaded portions. The process is followed according to the technique of the direct blending of colours. Shading with different colours of a darker hue occurs sometimes.

The illustrations belonging to the *Bāb* (BM), *Akb* (VA) and (CB) and *Razm* (Jaipur) are embellished with the finest details of nature, designs and motifs. *Bāb* (Moscow) and *Razm* (Baroda) are subtle in respect

to designs and motifs. The *Anwār* (Varanasi), *Dīwān* (Rampur), *Tā'rīkh* (Patna) and *Bāb* (Delhi) find a place between them.

The ground colours used are not necessarily light, but are lighter than those to be applied in subsequent fillings. The artist does not find himself bound by any convention regarding the gradation of colours except that the first filling should not obtrude on those that follow, but serve as a suitable base. A dark tone at the base is, therefore, followed by a darker one. Evidently, the artist began with primary pigments and finished the work in darker shades of the same pigments.

The outlines of individual figures receive utmost care from the artist. The painting is begun with a sketch, defining the limits of the objects within which the brush must move. After colouring and shading, these lines are finally confirmed in a darker tone and the figure given a well-defined form. At this stage, the work of colouring the miniature is over, and the pigments are left to dry.

For the choice of colours of natural objects, the painters depend for inspiration on nature itself. But in the colouring of designs and in the decoration of motifs, he allowed himself a greater freedom. No particular norm was followed. Exquisiteness was his aim here. The emerging patterns may be conceived in a variety of ways: matching or contrasting the general colour scheme—gaudy, austere, flat or tonalized displaying the maximum variety of colours, repetition of two or three colours, or the predominance of a particular colour.

In the matter of colouring it is possible to discern a certain procedure. The human figures, being the main objects of representation, were treated first. Animal figures came next and the background was coloured last of all. This shows that the artist began work without any definite colour scheme in mind. Each colour used was determined by the preceding one and may or may not have been in keeping with the first wash given to the background. When the figures of human beings and birds were completed, the background had to be treated part by part as required by the objects in the foreground.

Metallic powder, i.e., gold dust, was an important medium of the Mughal artist. Although gold was not regarded as a colour, it was frequently used in lavish quantities in single paintings, the way the colours were used. By and large the powder was used only partially, as for instance, to accentuate a particular part of a figure. Ornaments, costumes, arms, armours and designs are the common subjects rendered in gold dust. Sometimes gold pigment is casually used to represent aerial perspective. The sky could be painted fully or partly in gold pigment to depict morning or evening. Similarly, flames and rays of the sun were given a natural hue.

The miniatures were pasted on mounts by the *waṣlīgar* (one who prepared mounts for painting). The illustrations of the manuscripts were pasted on paper commonly used for calligraphy and no special mount or paste-board was used for support. Only in one instance, the folios of the

Dīwān (Rampur) are provided with cut mounts of an extra thickness embellished with floral motifs drawn in gold pigment. The miniatures were pasted on manuscript leaves at the appropriate places, i.e., in relation to the text. These leaves, being thin, were unsuitable for mounting the miniatures, especially those made in *tempera.* As a result, the leaves used as mounts got soiled with the material used for binding which became visible on the reverse side. From the point of view of preservation of the paintings, this kind of mount was inadequate. Margins were decorated with floral designs or several bands of lines in different colours. Only miniatures of the *Bāb* (Moscow) are without any lines or *ḥāshiyas.*

Generally, the paintings bear the names of the artists. Many of the names appear on the lower *ḥāshiya,* showing that they were written by a different person, probably a *naqshanavīs,* after the pasting of the mount. The tradition of signing the work was not in vogue at the Mughal Court, though the names appearing on the illustrations themselves may be the artists' autographs. One miniature signed by Lāl comes to our notice on f. 6 *Akb* (CB). The paintings of the *Bāb* (Moscow) do not display the names of the artists at all.

The Arabic word *'amal* is used for "execution" or *rang-āmezī*—the Persian term for colouring. Sketching has been distinguished from colouring and painting. *Tarḥ* is used for the outline or sketch. In case the word *'amal* stands alone, it implies the execution of the picture by a single artist. In the *Razm* (Jaipur), the term *rang-āmezī* is preferred to any other meant to colour the sketch.

Occasionally, the names of two artists may be seen on a single painting. In a joint work the sketching and the colouring are done by two different artists, e.g., on pl. 21 *Akb* (VA), the outline is by Basāwan and the painting is by Chatar. We come across many such examples in the *Akb* (VA) *Razm* (Jaipur) and *Tā'rīkh* (Patna). Sometimes, three artists have worked on a picture. The number of collaborators in one work were even four. Plate 1 *Akb* (VA) shows the outline by Miskīn, the colouring by Sarwan, the faces (*chihranāmī*) by an artist whose name is not clear, and the figures (*ṣūrat*) by Madhū. Generally, a work is divided into three parts, viz. the outline, the painting and the drawing of the face. For the last part, the Persian term *chihranāmī* was used. Sometimes, two artists finished the drawings of faces in one picture. The inscription on f. 32 *Akb* (CB) shows the names of three artists: *'amal* by Farrukh and *chihranāmī* by Manohar and Anant. It is not clear how such a complicated arrangement worked. The method of joint work mostly involved two artists—one for sketching and the other for colouring; or one did the sketching and colouring and the other finished the drawings of the faces. The Mughal artists seem to have been accustomed to this type of division of labour and the system was in vogue in the middle years of Akbar's reign. The illustrated *Razm* (Jaipur) and *Tā'rīkh* (Patna) are examples of such. A similar case is the *Akb* (VA) which belonged to the closing years of the reign, However, this was not a universal system of work for illustrations executed

earlier or in the intervening period—e.g., the *Anwār* (Varanasi), dated 1596-1597, and the *Bāb* (Delhi), dated 1599—mostly show the name of one artist.

One is inclined to think that under this system of division of labour, the skill of the painter should have tended towards delimitation. The display of talent of an artist depended on the co-artist as well—sketching and colouring are complementary to each other. The artist Basāwan,[9] who was mostly assisted by a co-artist, produced better paintings only when a good painter worked with him. Further, there was nothing like the specialization of a particular branch of art, i.e., sketching or colouring. An artist engaged for making outlines on one piece is found working as a co-artist for colouring on another.[10]

One wishes very much to be able to distinguish special characteristics in the art of different masters, but this is a task too difficult to accomplish. The reason is that common features predominate in the paintings, rendering such points as may seem to be individualistic, insufficient for any conclusive argument. All the artists use the same colour palette and tools. Despite the heterogeneity found in colour schemes, the colour media and the method of their application remains the same. The forms, proportions, lines and curves and, above all, perspective, are so stylized throughout that to a casual viewer the paintings could well have been the work of a few artists only. The themes—now a battle scene, now a court scene, now a hunting scene, or a gardener or a bird-catcher at work—were too varied to contain a single, individualistic consistent mode of expression. Besides, the system of joint work on a single folio obliterated the identities of the individuals.

However, the element of individuality was not entirely wanting in the artists. This is evident from some of the illustrations by Dhanrāj, Pāras, Shankar, Farrukh Beg and Farrukh *Chela*. Of them, the first shows a noticeable skill in the horizontally curved lines which are used with great clarity and boldness for shading mounds, and the trunks of the trees. He frequently uses blue and green which are skillfully manipulated to achieve a particular atmosphere.[11] Pāras seems to have specialized in the use of straight lines.[12] These are laid both horizontally and vertically for bringing out the shaded portions of the background and the folds of the costumes. War scenes and congregational settings in light colours seem to be his speciality.

Shankar is a skilled design artist: decoration and compactness are dis-

[9]*Tā'rīkh*, ff. 4, 6, 7, 9, 16, 17, 30, 53, 54, 57, 58, 61, 62 (Patna); *Razm*, pls. 10, 21, 22, 50, 59, 64, 65, 76, 112, 115, 117, 120, 121, 122, 124, 126, 127 (Jaipur); *Akb*, pls. 17, 18, 21, 24, 50, 61, 62 (VA).

[10]Basāwan worked as a side-artist in *Razm*, pls. 12, 39, 40, 53, 84, 106, 113, 145 (Jaipur); *Tā'rīkh*, f. 8 (Patna); *Akb*, pl. 81 (VA).

[11]*Bāb*, ff. 204, 305, 478 (BM).

[12]*Ibid.*, ff. 54, 194, 299.

tinctive features of his work.[13] Shankar Gujarātī's outstanding use of lemon yellow with a tinge of light orange gave his creations a soothing effect, and a certain delicacy.[14] The artist Dhannū specialized in painting garden scenes.[15]

The paintings done by Farrukh Beg—an artist of Qalmāq origin—are entirely Persian in feeling and atmosphere.[16] The drawings of human and animal figures, the designs on custumes, buildings, ensigns, etc., the depiction of hills and trees—all associate his works with the Persian style. The sky represented in gold pigment, two dimensional shapes, symmetrical buildings with profusely decorated columns, human figures drawn with longish faces and attenuated and elegant bodies characterize Farrukh Beg's work. Farrukh *Chela* has preferred slithering forms in animal drawings. The figures of goats and sheep on f. 177 *Dīwān* (Rampur) and the beasts painted on f. 30 *Anwār* (Varanasi) can be distinguished from others by a distinct portrayal of animals. The same forms may well be observed on f. 82 of the *KhamsaN*,[17] though here the distant landscape has greatly changed. The early paintings[18] of Farrukh *Chela* may be classified on the basis of the predominance of Persian style, whereas in his later works[19] he seems to have absorbed the indigenous style. Of the hundreds of painters that worked at the Mughal Court only a few could develop a personal style, though none of them could form a school.

PERSPECTIVE

The illustrative character of the miniatures introduces a great thematic variety. As we turn over its pages we see a panorama of objects: the sky, mountains, rivers, trees, buildings, men and animals, all depicted in different moods, actions and planes. In the manipulatian of the themes, the attention of the artist is concentrated mainly on achieving aesthetic satisfaction. The ornamental designs and motifs complementing the main figures are used as additional means to obtain that effect. Hence the bias for details—which are carefully rendered in uniform size, irrespective of the distance or height giving the impression of a stylized technique—dominates the whole composition. Perspective as a dimensional expansion of the objects does not seem to have been properly understood. The horizontal extension of the view gives place to vertical elevation.

[13] *Ibid.*, f. 252.
[14] *Ibid.*, ff. 279, 314, 391, 395.
[15] *Ibid.*, f. 173.
[16] *Akb*, pls. 96, 117 (VA); *Dīwān*, f. 314 (Rampur).
[17] *KhamsaN* (Or. 12208, BM).
[18] *Dīwān*, ff. 116, 177 (Rampur).
[19] *Bāb*, f. 136 (BM); *Razm*, pl. 137 (Jaipur). Other miniatures attributed to him in the *Razm* (Jaipur) and *Tā'rīkh* (Patna) are the examples of joint work where distinctive features of his art have become diffused.

It may be said, then, that the treatment of lines, forms and colours which give a perspective was either unknown to the painters or was avoided in favour of a graphic wholesome representation of the objects. This is most clearly observed in the treatment of such inanimate objects as carpets, utensils, minarets, floors and building, all of which are depicted without any consideration being given to the rule of the convergence of lines or their vanishing distance. The occurrence of a greatly diminished hill or a tree introduced to symbolize distance indicates the lack of a correct understanding of the phenomenon. The intervening space, which is shown flat and unaffected by the visual change taking place with the increase of distance, makes these objects seem incongruous.

The same is true about the artists' understanding of the principle of eye-level. The figures are juxtaposed at different levels. The plane remains vertical. The objects are depicted in an ascending sequence, signifying an increase in the distance, which effect is further senhanced by the alternate application of soft and hard colours. The objects drawn on different planes, imposed one upon another are identical to the Persian *qalam*. Various planes are employed to divide the composition into several parts to represent different events taking place at one time, or the events specifically related to the central theme. One is tempted to think that such divisions are not incidental but have been introduced as additional devices for producing the effect of height and distance. The horizontal plane is depicted by human and animal figures. Height is represented by the sky. The hills symbolize distance, whereas the buildings and the trees produced the effect of vertical plane.

Planes could be distinguished by introducing a hillock, or a castle, or a mound of earth or sparsely grown trees, tufts of grass or plants, a stream or a river, and in an indoor or camp scene, a carpet or a palace wall, etc., between them. This was a tradition derived from Persian miniatures. Tanks, floors, brooks, carpets, etc., are invariably drawn from a bird's-eye view (divergent perspective) and the human and animal figures from the direct view (convergent perspective). The absence of unity in perspective, or the presence of multiple perspective,[20] has resulted in the enhancement of a tilting effect. This was a general practice of the Persian painters and this technique involved the ground being tilted through 90 degrees. The restricted tonality in colour further produced a tilting effect.

The composition of figures in order of their importance and function was useful to the Mughal painters. The inner circle is generally occupied by a king, the next by nobles and chiefs followed by the attendants of the court. The ordinary man, like a cultivator or a shepherd, may be introduced to make the outermost circle. This hierarchical perspective was known to the Ajantā painters[21] who improved the composition by using

[20]Hajek, *op. cit.*, p. 28.
[21]*Ibid.*

this technique in addition to the direct view and bird's-eye view. Nevertheless, Mughal perspective has differed from that represented in the Ajantā frescoes. The former tends to be vivid in the portrayal of distant landscape by conveying the impression of a receding background. Besides, the superimposition of figures, i.e., the placement of figures one upon another, very often observed in the Mughal miniatures, created the illusion that the figures were drawn at varying distances.

Casual examples of distant landscape are met with. The objects treated are generally buildings, a castle visible from a hunting ground or battle-field or an expedition scene, as well as trees and hills. The representation of hills, with trees, animals shown perched on them and trees laden with flowers and green foliage, is according to the Persian tradition. Here no particular scale seems to have been used for determining size. Details become sharper but do not disappear. Colours fade but not too much. However, in a few instances, distant landscape has been depicted as hazy and submerged in the background. A tree or a hill appears in a patch of grey, greenish or bluish pigment. The scale too has diminished and the details have disappeared. But this representation of distant objects, instead of serving as a perspective, seems to divide the painting into two distinct parts—one in flat, and the other in blended, colour. In a few paintings, the distant objects are shown shorter than those in the foreground, but the diminution is too slight to correspond with the distance shown. Moreover, the decrease in the size of an object at the same level is not proportional. The gradual fading of colours may be found but the effect is to a considerable degree neutralized by the presence of details at all levels.

The light effect is invariably flat. All the objects are shown bathed in light from all sides. In the night-scenes also, the pigments used are the same as for the day. Colours are rarely indicative of time or weather. However, an Akbari painter was not quite unaware of this. Getting away from the strict Persian convention, he painted the sky in varying colours, e.g., orange, red and yellow, to indicate morning or evening. However, the sun or a crescent or a full moon with a star-lit sky or a flight of birds were only symbolically present for the rest of the scene remained unaffected.

The linear perspective had become difficult with the introduction of several planes in one picture and the drawing of different objects from varying viewpoints and angles. The position of the artist's eye is invariably shown changing. The convergence of angles is rarely represented in a few buildings. The Mughal painter's technique was greatly involved with the bird's-eye view which enabled him to observe the action taking place behind the palace wall or a hillock. It is a stage of deformation conveyed by employing an almost physical line between the nearer and distant objects. Consequently, this technique involved the device of dividing the picture into a number of small spaces depicting varying actions and themes.

The method of introducing receptacles became very popular in Mughal art and painters used them frequently to illustrate the theme, provided the space permitted. These receptacles were placed, generally, in a vertical or zigzag manner. They helped to create the impression of receding space. In the indoor scenes, the ground is casually covered with plants painted alternately at measured distances. As against this in an expedition scene the ground was represented with the variation of gradations in pigments which gave a suggestion of scale perspective. This produced a lively effect as though the onlooker himself was in motion, experiencing the phases of the picture as a sequence in time.[22]

Figures were distinguished from the background by shading the pigment around them, though we never come across a shadow. Adjacent figures are distinguished by variation in costume design and colours, as well as by deepening the outlines. In group paintings, each figure is treated independently as a complete object in itself and is linked to the rest of the canvas by the logic of the event illustrated rather than by any specific theme of light and shade, atmosphere or time. There is no one focal point. Each figure seems to invite the eye to the exclusion of the others. It is the faces and the gesture of hands only which help to create a unity in the objects. In a few instances the action reported in the figures produces a rhythm in the picture.

The paintings exhibit a peculiar lack of proportion among objects when presented in a single scene. It is another stage of the deformation of reality. Not infrequently, we meet trees of the size of small plants and human beings the size of towering forts and buildings. Such objects seem to have been painted in order to fill blank spaces. Evidently figures so included had to be reduced or enlarged in proportion to the space required to be filled. It seems to be a more complicated artistic distortion of the reality, and this is the result of the greater emphasis on the presentation of over-crowded animate objects. Figures on the margin are often shown incomplete or covered by the border. Most probably it was done to suggest continuity in the scene. It was an Islamic tradition to represent figures cut by the margins of the picture plane, or drawn half-hidden behind the hillocks, or trees, or walls to create an illusion of continuity in the scene. The Mughal painters derived this method of composition directly from Persian art and their expression remained identical to the latter.

[22]Rawson, *op. cit.*, p. 111.

2 treatment of themes

The Mughal painter, while working on illustrations had to conform with the text. He could rarely choose his theme. He portrayed an incident in which he remained a story-teller. Objectivity was the basis. Objects in themselves were of greater interest and a Mughal miniature does not convey anything other than what it portrays. The great variety of themes depicted in the illustrations are, in essence, the elaborations of various events, for instance, the Emperor's life, so as to include a number of objects to complement his central figure. Animals, hills and trees are introduced to intensify the landscape; commoners, camp auxiliaries and buildings are included to specify the situation; attendants, the royal insignia, decorative objects and the like follow, as a matter of course, to complete the environment where the action takes place. In many of the miniatures, the figure of the Emperor does not appear at all, yet the very association of his personality in the mind of the artist seems to permeate the painting. The decor of the court scenes, the martial life of an adventurous emperor, the seriousness and solemnity accompanying the behaviour of the courtiers persist as the inevitable modifiers of the court painter's profession. There is hardly any occasion for gaiety or for lips to open in a smile. It seems as though even happiness is disciplined in the mannerisms and etiquette of the court.

Figures representing the main theme generally occupy the central position in the picture and the complementary objects find their place according to their importance. We talked of circular compositions in the previous chapter. Themes depicted in a vertical order are no less common. Here too the figures are composed in hierarchical order. Diagonal compositions are infrequent. A marked tendency of the painter is to depict a larger number of objects directly related to the theme. For instance, while representing a hunt, different animals will be crammed into the smallest empty spaces Similarly, the picture representing a musical performance will show a large number of musical instruments, and a feast scene a great variety of utensils.

The illustrations depicting the themes of war are common (Pl. IX). They are all composed on more or less similar lines, allowing for variety only in the juxtaposition of figures. In fact, it is possible to interchange their captions specifying the location of the battle without any loss of

relevance. Nevertheless, the imaginative artist does not seem to be wanting in the art of permuting the contents. Normally, the Emperor's figure is given in the centre or at least at a prominent spot. His figure is further accentuated by leaving some open space around him. The attendants, soldiers and courtiers are lined up or clustered around in groups. A separate corner is left for the bearers of the royal insignia. This is the essential pattern of the majority of paintings. The drum-beaters and the insignia-holders form the outermost circle of the composition. Occasionally the royal ladies, represented on the battle-ground in the distant corner, watch the scene from the *'imārīs* mounted on the backs of the elephants. A large portion of open land sparsely covered with trees, a precipice, a hillock, a farmer or a shepherd in the background, a stream with ducks swimming in it, a row of birds in a distant corner and a bit of sky accompany an expedition scene. When a battle is shown, the scene is naturally saturated with action. Open spaces, precipices, birds, etc., are either omitted for want of room or relevance, or they appear only casually. The simultancity of vision and the profusion of architectural objects are necessarily used in a variety of scenes, such as the besieging of a fort or the assaults in and outside the walls of a city. Cavalry, as the main focus of the Mughal army, is represented on numerous folios. Elephants appear here and there, with hardly any evidence of the side to which they might belong. The army is shown well armoured and includes those charged with such auxiliary assignments as beating the drums, driving the elephants and carrying the royel insignia. An artist, while showing the scenes of fray, does not seem to make any distinction between the arms and armours of his opponents in or outside India. The uniforms of the soldiers, viz. Rājpūt, Afhgān or Central Asian, are identical.

Camp scenes often have a distant background of domes and minarets of a nearby town. The Emperor's camp occupies the largest space in the composition and is provided with *qanāts*. The Emperor is shown directing the generals, or examining the war booty, the war prisoners or the heads of rebels, or meeting some ambassador or a prince. The stables of camels, horses, etc., form the background of such themes, and in a few instances, grooms are represented at work. Sometimes, a river with boats, or a castle or buildings are shown in the background. It is rare to find the representation of camp activities. Bābar is once shown visiting a camp. This includes the camp market where we see a shopkeeper weighing some article (*Bāb*, f 205, Delhi). Such scenes, however, remain subsidiary. In the present example, the central figure of the Emperor, followed by his guards, dominates the whole view. The night scene in a camp depicted on pl. 67 *Razm* (Jaipur) has nobles sleeping inside the tents and watchmen on duty, with torches in their hands.

Court scenes generally show the Emperor seated on a throne placed on a raised platform. Both the wings, i.e., right and left, are occupied by nobles and the extreme margins by attendants. The insignia holders took their position on the side, close to the Emperor. The Emperor is usually

seen receiving ambassadors and nobles, issuing orders, examining the war booty, hearing state affairs or casually enjoying tricks by jugglers or a musical performance. The scene is further embellished by a background of architectural designs, carpets with intricate interlacing floral motifs, floors decorated with geometrical patterns, latticed windows, an ornamented throne and richly designed costumes.

Hunting-themes seemed to be a favourite of Mughal painters. These are records of bravery of the Emperor who is always depicted in the centre, usually mounted on a horse, seldom on foot. The keen observation of nature, the vivid portrayal of animal life, the violent action, the variety of postures, the minute depiction of details and the natural surroundings characterize hunting scenes. There is usually a sparse setting of hills, or few trees and plants, uneven grassy ground and sometimes a stream. Mostly, the scenes are crammed with different animals in a *qamargha*—a hunting-circle. Animals in fright are represented running in various directions to save their lives. Among the animals, the deer, specially the black buck, fascinated the painters most and it has been often depicted in the outdoor scenes. The illustration representing Akbar hunting wild asses is differently treated.[1] A few animals of a type are shown, leaving ample space for their escape and for other objects to be drawn. A similar theme, with a slight variation represented on pl. 84 *Akb* (VA), shows Akbar completely tired and sitting under a shady tree. The carcasses of hunted animals are lying at a distance and a few animals which escaped are shown fleeing for safety.

The scenes represented on pl. 17 *Akb* (VA), and f. 283 *Bāb* (BM) may be taken as the best examples of this theme. The former, sketched by the artist Basāwan shows the Emperor striking a tiger on the neck with a sword (Pl. X). Others are shown killing animals with spears, arrows or swords. An attendant is also shown wielding a gun. The supplement on pl.18 of the same manuscript is a continuation of the hunt (Pl. XI). A double-page illustration on ff. 283 and 284 of the *Bāb* (BM) painted by the artists Manohar and 'Abdullāh respectively, represents the *qamargha* made of tree-trunks and branches and guarded by attendants, commoners, etc. It depicts the hunting of a deer and a *nīlgāi*, commoners engaged in driving the animals within the reech of the central figure, the Emperor inflicting a blow on an animal's neck, attendants managing the hunted animals, a few men witnessing the scene and lastly animals in a confused state, some running for safety. The second part of the painting on f. 284 completes the hunting-circle. As is characteristic of Mughal miniatures, numerous animals have been painted; and because of the number, the artist composed them irrespective of size. An identical composition unsigned, of a deer hunt on f. 42 of the *Tā'rīkh* (Patna), vividly represents different weapons employed for hunting, viz. the sword, the bow and arrow, the spear, handgun, a thick stick mounted with iron rings at the end (a type of the ordinary

[1]*Tā'rīkh*, f. 331 (Patna).

mace) and long sticks provided with net-bags at the end to trap the animal's horns. The usual activities of the Emperor, the nobles and the attendants have also been shown (Pl.XII). The vivid portrayal of action is keenly felt in the human and animal figures—the animals escaping in a stampede, the grooms giving fodder to the animals.

The deer hunt with leopards, tamed and trained for the purpose, is the subject of a few hunting scenes represented in the *Akb* (VA) on pls. 24 and 92-93 (a double-page illustration). Hunting with leopards was a royal game which the Emperor enjoyed. These paintings represent Akbar on horseback, watching the scene and instigating the leopard to rush at the deer. The deer and rams run wildly, the leopards are shown taking positions for chasing or leaping to kill the animals and the attendants rush to the hunted animals. Mostly, in the hunting-scenes, an effort is made to show the use of all the weapons, and to introduce all the actions, for instance, the Emperor dealing a blow, a couple of attendants managing the carcasses of the hunted animals, some wielding the gun and yet some others busy trapping animals.

The trapping of wild elephants, tigers and deer is the theme of a few paintings.[2] The figure of the Emperor appears in them as a matter of course. The background is treated like the hunting scenes and the method of encircling the central figure—a characteristic of the Akbari illustrations—has survived. The miniatures representing the trapping of birds shall be discussed at some length later in this chapter.

Some paintings depict animal fights. These may be taken as a representation not only of wild life but also of the fact that animal fights were a source of amusement.[3] Generally, elephants, deer (specially the black buck) and rams were trained for combat. The rare representation of the first on pl. 81 *Akb* (VA) shows the combat on the outskirts of the city. The central figures of elephants drawn in the lower part are again encircled by human figures, keeping the Emperor's position in the middle. The fights of rams and deer are composed in a closed campus of a garden on f. 492 *Bāb* (BM).

The portrayal of flora and fauna displays an admirable artistic skill. There are 68 representations of animals and 51 of trees contained in the various copies of the *Bāb*.[4] Some of these are marvellous, not only for life-like representation, but also for overall composition. The animals are generally shown in action. The Moscow manuscript is comparatively inferior (so far as the depiction of this theme is concerned) to the other two manuscripts, viz. the Delhi and BM, yet it has some remarkable animal paintings, e.g., the one showing the pheasants and the fight of black bucks.[5]

[2] *Akb*, pls. 34, 40 (VA).
[3] *Akb*, pls. 81 (VA); *Bāb*, pl. 38 (Moscow).
[4] *Bāb*, pls. 88-113 (Delhi), pls. 57-86 (BM), pls. 36-47 (Moscow .
[5] *Bāb*, pls. 38, 42, 43 (Moscow).

Gloomy themes, such as the illness or death of the Emperor, are represented by gestures, the expressions of faces, the presence of a *tabīb* attending to the sick Emperor, a few attendants engaged in preparing the medicine and lastly, the nobles waiting outside. In a scene representing the death of Emperor Tīmūr on f. 134 *Tā'rīkh* (Patna), the artist shows how the various onlookers react. The innermost part of the palace depicts the near relatives, including the royal ladies around the dead body. Next are shown friends and nobles weeping bitterly, sitting with folded hands and bowed heads while some in an outburst of sorrow, are tearing their clothes. A noble is consoling others, and at the main entrance is a figure in a pensive mood, and another of an old man shocked at the news. Similarly, on f. 186 of the same manuscript the representation of the coffin of Mīrzā Shāh Rukh, is more or less identical. A scene representing a princess on her death-bed, on f. 100 *Anwār* (Varanasi), painted by Manohar, is also on the same lines.

Themes on the execution of the rebels show scenes of hanging, crushing the rebels under the feet of raging elephants or throwing them to the ground from the top of palace. Plate 21 *Akb* (VA), drawn by Miskīn, shows Adham Khān being thrown to the ground from the wall of the palace under the order of Akbar. The frightened commoners and attendants are shown rushing away from the scene in confusion and the central figure is shown pointing downwards. The execution of Khān Zamān's followers by the use of trained elephants is represented in a diagonal composition sketched by the same artist on pl. 90 (*ibid.*). It is like a living scene, displaying the furious outburst of the raging elephants.

Ceremonial scenes—a victory or the birth of a prince—include feasts and festivities. Male and female dancers, and musicians are often part of ceremonial scenes. Though there is no evidence of a painting devoted entirely to the musical theme, in a few miniatures however, musical parties form part of the court scene. The celebration of a victory is represented by '*alams*, flags and musical instruments belonging to the *naqārkhāna*, viz. *naqāra, qarnā, surnā, sanj* and *seeng*. Such a scene of f. 128 *Bāb* (BM) represents Bābur sprinkling holy water on the '*alams* fixed in the ground in a line. A similar painting may be seen in other copies of *Bāb*.[7]

Birthday and marriage ceremonies have been shown in a very stylized manner—a princess with her new-born baby in the inner part of the palace, the astrologers preparing the birth chart, the musicians and dancers, mainly female artistes, giving their performances, nobles meeting the Emperor to congratulate him on the birth of the baby and lastly, in the lower margin, the distribution of gold or silver coins among the poor, or sometimes the performance of the *naqārkhāna*. These are composed so as to include all of them in the picture. An illustration on pl. 78 *Akb* (VA), representing the birth of a prince is composed in ascending order. The

[6]*Tā'rīkh*, ff. 134, 186 (Patna); *Bāb*, f. 70 (BM) pl. 20 (Delhi).
[7]*Bāb*, f. 30 (Delhi); one plate from BM published in *Larousse Encyclopaedia*, pl. 112.

lowest group belongs to the commoners, saints, beggars, etc., waiting for alms. The musicians and attendants are in the middle, the former group giving their performances. Lastly we see the attending maids taking care of the child and the princess in her bed. In another instance, pl. 80 *Akb* (VA) the picture plane is divided into four parts: the innermost part represents a princess with her baby attended by her maids. The adjoining part shows female musicians and dancers performing, while the third depicts astrologers with their instruments, busy preparing the horoscope. Musicians of the *naqārkhāna*, accompanied by the male dancers outside the palace, and a man rushing to the entrance with a cradle on his head, are all complementary to the theme (Pl. XIII).

An outstanding composition of such a theme—a marriage ceremony—belongs to f. 40, *Tā'rīkh.* (Patna). It is an unsigned painting, the composition of which is divided into four parts. The upper half, divided diagonally, represents the Emperor and the nobles (the latter wishing him on the occasion) and the princess attended by her maids. The lower half accommodates the musical parties. First of all, there comes the group of female musicians and dancers and thereafter outside the palace comes the *naqārkhāna* accompanied with most of its musical instruments. The painting is distinct for its variety of musical instruments and the performance of the *naqārkhāna.* The rhythmic action depicted in the dancing figures, the stretched hands of drum-beaters, and the *sanj*-players produce a dramatic effect in the picture (Pl. XIV). The birth of Akbar, painted by Khem on f. 284 (*ibid.*), is similarly depicted, though the placement of the various figures and objects has changed.

To illustrate the theme of festivity, the artist seemed to employ all sorts of musical instruments. The miniature on pl. 8 *Akb* (VA), represents different instruments, e.g., *daf*, *naqāras* of varying sizes in three pairs, *qarnā*, *surnā* and *sanj*, to the accompaniment of the vocal musicians and dancers. The *daf* or *chang*, a flute, a *rubāb* and sometimes a *duhul* are the instruments held by musicians. The *tambūra* or the *ghichak* are rarely seen. The dancers are in pairs, their poses generally identical: a raised foot, and hands stretched upwards. Variety is sought by positioning their hands at different angles. Similarly, the *daf*- and the flute-players are represented in identical poses. The dancing figures generally occupy the central part of the composition, surrounded by their companions and onlookers. Plate 79 (*ibid.*) composed in a circular order shows dancers in the centre. Nevertheless, the Emperor's seat remains quite distinct. The lower margin is occupied by attendants and others. Human figures drawn in different poses and with varying facial expressions make the picture very lively. The dancing figures are outstanding as embodiments of movement and rhythm.

In other instances, composition in the ascending order is preferred. In the *Bāb* there is a painting of a musical performance at Kabul on the occasion of Humāyūn's birth (f. 295 BM). It shows a feast where musicians and dancers are present. The musical performance includes male and

female dancers, the former wielding the sword, and the musicians playing on the *rubāb*, *surnā*, *naqāra*, *chang* and flute. The plants with blue, white, red and pink flowers, the fountain, and the garden accentuate the central theme. In the lower group attendants etc., are shown doing their work. Interestingly, two musicians, the *rubāb*- and *daf*-players, are shown waiting outside. Similar objects comprise a scene of feasting, on f. 4 *Tā'rīkh* (Patna), painted by Basāwan. Though the location of the tank, the number of the musicians and their instruments vary, the central position of the dancers and the place of the main *dastarkhwān* remain the same. The background of cypress-trees, embraced by the trees laden with five-petalled flowers and dense foliage, is in a striking harmony with the former scene. There is a very vivacious representation of the human form.

The performance of the *naqārkhāna* is complementary to the themes of greater importance, viz. the celebration of the prince's birth. It is always represented outside, at the main entrance, casually accompanied by one or two male dancers. In the *Razm* miniatures, the musical performance is a part of the *havan* or *ashwamedha yagya* and feasts, etc.[8] A musical performance in accompaniment to the *ashwamedha yagya* procession is in the typically Indian tradition.

Scenes exclusively depicting a feast or the preparation of a feast, show cooks and attendants serving the meals, and the *dastarkhwān* in the centre on a platform covered with a carpet. Folio 253 *Bāb* (BM) depicts one such scene. Cooks are busy serving meals from the *degs* with the attendants holding the *qābs* and platters. The painting representing Bābur attended by Muzaffar Mīrzā on f. 257 (*ibid.*) is a composite picture which includes both the kitchen and the *dastarkhwān* (Pl. XV). The picture is drawn in ascending order. The lower group belongs to the cooks and attendants. The centre is composed of the *qābs*, *piyālās* and bowls containing food along with the serving attendants. The upper part displays the *dastarkhwān*. The illustration on pl. 28 *Akb* (VA) is more or less composed on similar lines. However, the kitchen scenes represent more men than utensils, and yet, in a few instances it is the latter that strike the eye.[9] A miniature exclusively illustrating a feast is rare in Akbari paintings. The only instance we come across is the one executed by Tiriyā on f. 269 *Bāb* (BM). As in former examples, the nobles are shown sitting on all sides of the *dastarkhwān*, being served by attendants.

A manuscript of importance was repeatedly illustrated whenever required. Several copies of different manuscripts have survived to this day. These contain many miniatures, representing common themes, though they invariably differ in their art of representation. The individuality and the skill of each artist do not fail to express themselves in the treatment. This is more clearly observed by comparing duplicate reproductions of the same theme. One theme which is common to all manuscripts is that of

[8] *Razm*, pls. 89, 121 (Jaipur).
[9] *Bāb*, f. 253 (BM).

bird-trappers at work.[10] All these are differently composed. The artist has conceived of the layout in his own way. In the Moscow painting, the foreground is entirely covered by a net with birds trapped in it. The four trappers engaged in the work are shown in an expectant mood on the left margin. The rest of the space is filled with rocks and trees growing sparsely. It is a good composition insofar as the central theme dominates the whole scene and the complementaries are kept in the background. A similar composition is found in the Delhi manuscript, bearing the name Payāg. The composition includes a trapper hiding behind a thatched screen, birds approaching the net, and a few others watching the scene composedly. The distant landscape composed of hillocks is balanced by a stream in the foreground. The central place is left for the action. The variety of birds is much more in this painting than in the earlier, and from the point of view of execution, too, it is clearly superior. The painter of the BM miniature is Shiyām. Here the composition is far more imaginative, but it includes too many complementary objects—a massive castle in the farthest corner, balanced by the crooked elevation of a cliff and a black cluster of clouds overhanging the top margin; huge, dense trees; a stream in the foreground with ducks swimming, and *sārus* cranes composedly watching; shrubs stretching along the bank; a company of no less than ten human beings, waiting at the trap, and again, a pair of foxes perched fearlessly on the rocks at the bottom (Pl XVI). Yet, a sizeable portion of the centre is left for the action. A cluster of birds is shown descending on the net, or already trapped on the right side. The trappers are on the left. The artist has tried to be as vivid as possible and has taken care to show all the implements used in bird-catching. These include a thatched screen, a glued stick and a falcon and there are cages and baskets for keeping the trapped birds. The layout of the Fogg illustration is again different. Here, a man is shown actually using the glue-stick. The landscape is well balanced by a distant plane and thick trees, dividing it into three parts. However in the accuracy of line drawing, atmosphere, detail, colouring and especially in the depiction of the various postures of the birds, the BM painting excels all others. The human figures here are certainly more varied and characteristic. As compared with this painting, the other paintings seem not only too simple, but also a trifle clumsy. The birds are shown mostly in profile. The treatment of the trees is fine in all of them, yet a wide conceptual difference sets them apart from one another. Despite the general affinity characterizing the setting and the atmosphere of similar themes, the resourcefulness of the artists lends to a variety of representation.

The Mughal painters were versatile in representing different themes. Hindu themes portraying the celebration of a *havan* or *yagya*, Hindu gods and goddesses, the idea of the hell, demons, the *devtās* in the service

[10] *Bāb*, f. 45 (Delhi), f. 190 (BM), pl. 22 (Moscow); bird-trappers shown at work (Fogg) reproduced in Welch, *Art of Mughal India*, pl. 9.

of god Indra, etc., were painted with equal skill and indicate the width of imagination of the painters working at Akbar's Court. The legendary themes left a greater scope for the artist's imagination. In the treatment of such themes, nature occupied a prominent space. The objects directly relevant to the story are given the first place while nature—sky, hills, river, trees, plants, buildings, hillocks—is taken as subsidiary. In a few paintings the landscape has become prominent and the figures are left in the background. To make the distant view more life-like, commoners are casually represented.

Poetic themes, describing different poems composed by Hāfiz, represented in the illustrations of the *Dīwān* are expanded like the legendary themes. In these paintings, commoners and animals, and sometimes the nobles or the Emperor, are depicted. Events generally relate to the life of common men and provide ample ground for an artist to utilize his observation of their life-style. The *Anwār* (Varanasi)[11] presents a cultivator, a wood-cutter, a fisherman, a washerman and his wife, a scribe and his helper, village girls, etc., who are infrequently painted in other manuscripts.

[11] *Ānwār*, ff. 61, 113, 160, 218, 242 (Varanasi).

3 nature, human figures, animals and decorative motifs

An attempt will be made here to unravel the complexities of nature, human figures, animals and decorative motifs as represented in the illustration.

NATURE

Nature, in all its variety and sumptuousness, forms a very important part of Mughal miniatures. Pure landscape painting did not seem to attract the attention of the Mughal painter, but natural objects appear frequently and for various purposes. Especially, for decoration they come to the Mughal artist as a matter of course. Stylized forms of leaves and flowers dominate in the *ḥāshiyas* of the paintings. The designs on costumes, *shāmyānas*, utensils and carpets are generally drawn from nature. But it is in the background of an illustration that we invariably find trees, hills, mountains, streams, hillocks with shrubs, a clear, blue, starlit sky and a crescent moon, or a cluster of clouds. These may be variously represented in harmony with the theme of the painting.

The love for nature has quite often resulted in a profusion or incongrous placement of leaves, trees or decorative foliage which lend the painting a touch of artificiality. There is however, a plausible reason for this. Restricted as he was to defined themes, the artist enjoyed very little freedom of expression. It was only in the depiction of nature that he could give a loose rein to this creative talent.

Emphasis on minute details is another conspicuous feature of Mugal art. The Akbari illustrations provide us with striking examples. Depending less on the light-and-shade technique, the Akbari artists seek to bring out the intensity and identity of an object mostly by means of detail. It is more a matter of technique than of expression of the artist's powers of observation, and is used with equal facility in the treatment of human figures as well as of nature. In the latter, however, one finds an inconsistency which betrays the limitation of the painters. For instance, the stem of a tree is generally rendered with such finesse that it would seem to be enlivened by a three-dimensional effect. On the other hand, the leaves are found to have

been done mostly in flat colours, and are stylized in form.

Especially profuse in nature are miniatures on hunting, gardens, feasts, bird-trapping, expeditions, etc. Plants and trees inside palaces show the pervasiveness of nature in the imagination of the artist.

Sky

The sky (Pl. XVII) seems to be an essential part of a composition and is generally on the top margin. The fact that it is often precariously accommodated in a very narrow strip is indicative of its appearance being essentially a formality. The representation of the sky is more frequent in Akbari painting than in the Persian *qalam*, and its origin can be traced to Chinese and European art.

The horizon is a special feature of miniatures. It is used as a means to create the effect of distance, depth and solidity, and to divide the painting into two planes, horizontal and vertical, represented in nature by the earth and the sky. In a few instances, the sky is predominant in the composition, but this practice is not common. Frequently it has been used as a means to define the time and atmosphere of the scene depicted. This is achieved by grading the blue pigment. The light-blue pigment—cobalt blue or a thin wash of a blue tinge—is used to depict daytime, whereas night is shown by dark blue—Persian blue, often with a tinge of purple. Sometimes, night is characterized by showing stars in the sky, drawn repeatedly at equal distances in the form of an all-over design or casually scattered in the sky. A crescent or a full-moon is rarely used in a starlit sky. The sun might be painted to denote day. While emphasizing on atmosphere, the artist would often use such other means as the flight of birds across the horizon to show morning or evening. A tinge of orange or red could be mixed with blue, or gold pigment laid flat to the same end, but this was rare.

Generally, the sky is painted flat in a monotonous blue. To enhance the effect of depth the upper part is usually darker than the rest. Monotony is, however, relieved to a great extent by the introduction of tints of orange, red, yellow or gold in treating the sky and clouds, and mixing the two by using different shades of one or more colours. This aspect is peculiarly true to, and distinctive of, Akbari illustrations, as opposed to the Persian *qalam*. The clouds are drawn with three-dimensional effect, sometimes like heavy drapery folded in curves. The deep shading is reminiscent of European art. Of similar derivation, though very rarely painted, are flying angels in the midst of floating clouds. Chinese influence is traceable in the stylized representation of clouds, in the form of a dragon and in the repeated use of concave and convex curves, so placed as to form an eye, while the Persian is evident in the flat use of Persian blue for the sky. Clouds, as shown in the paintings of the *Razm* (Jaipur and Baroda), make a class by itself. They are three-dimensional in effect, with thick shading, and a blending of colours in a variety of tones and gradations.

Hills and Mountains

Hills, mountains, and rocks (Pl. XVIII) silhouetted against the sky form the background of many miniatures. The hills are drawn in curved lines and their tops are rounded. While showing a range of hills, the artists rarely painted tall rocks straight. These tilted rocks are characteristic of Persian painting,[1] where hills and mountains follow a few, well-defined forms, and for that reason are stylized regardless of the situation. This is generally followed in the Akbari paintings. What distinguishes them from the strictly Persian convention are their modulated contours and variations in patterns. In many instances,[2] the curves have become simpler and sometimes a group of rocks are drawn together so as to depict a single elongated elliptical curve, a tradition more akin to the Indian style of representing a hill or mountain.

Rocks are usually painted in the pre-sixteenth century Persian style.[3] Animals are often shown perched on the hills; of these, the wild ram and the ibex are favourites of the artists. This practice has survived in Akbari paintings also. Plants, waterfalls and rivulets add to the surroundings.

Mountains are painted in purple. This colour was prepared by mixing zinc oxide with a purple pigment. The distant hills are shown by using a light-blue pigment; golden yellow, bluish grey and reddish colours were sometimes used. Generally, the hills are shown in groups and to distinguish one form the other, their colours varied. Two or three colours, predominantly green, yellow, red, blue, a thin wash of orange, etc., and gradations of colours were used. This technique was similar to that of the Persian *qalam*.

The hills were also used for dividing the canvas, where several scenes were intended to be shown at a time. They demarcated one scene or act or situation from the other. Moreover, in the absence of a correct knowledge of perspective, the painters made use of the hills and such other objects for portraying distance and depth.

Rivers

Rivers (Pl. XIX) are shown in their natural surroundings, with stones, herbs or trees on their banks. The overall effect emerges as a medley of waves, whirlpools, fish, boats and currents. The Mughal painters have shown their originality in painting turbulent waters and whirlpools. They represent water in many ways. Waves painted in zigzag lines of white on a grey surface, with or without foam exhibit an affinity with the Indian tradition. One may find a fish or two, or a tortoise in the water,

[1]Motichandra, *The Technique af Mughal Painting*, p. 55.

[2]*Akb*, ff. 10, 25, 112, 123, 155, 187, 188, 248 (CB), pls. 12, 53, 58, 61, 63, 65, 87, 88, 98, 99, 102, 103 (VA); *Tā'rīkh*, ff. 26, 53, 55, 101, 126, 166, 170, 178, 226, 230, 252 (Patna); *Razm*, pls. 4, 6, 41 (Jaipur); *Bāb*, pls., 9, 16, 19, 21, 22, 28, 33, 34 (Moscow).

[3]Barrett and Gray, *Painting of India*, p. 81.

generally shown half-submerged. In changed surroundings, a lotus,[4] with leaves painted realistically, may be seen on the surface. Both of these ideas had become patented in the paintings and can be unmistakably identified with those found in pre-Mughal Indian art. Crocodiles or porpoises drawn like dragons are reminiscent of the Chinese *qalam*. In other instances, the current, represented in comb-like lines on the blue surface, is very much in the Persian style. The introduction of ducks etc., as part of the scene seems to be a Mughal innovation.

Blue or steel grey is used for the base. The lighter tones are achieved by mixing zinc oxide. A tinge of orange or yellow is often used to depict whirlpools.

Trees

The backgrounds of miniatures are generally detailed with trees and plants (Pls. XIX-XXII), especially in paintings of camps, hunting, bird-trapping, feasts and expeditions. Trees are usually painted with dense foliage and long, straight trunks, a style evidently derived from pre-Mughal Indian art.[5] Within the limits of these forms, variety is created by rendering some trees to have a conical top, or a round or oval growth of foliage. Sometimes, trees were painted above the horizon.

A pleasant exception to the stereotyped art of Akbari illustration is the remarkably realistic and free rendition of tree trunks (Pl. XXI). Minute details of the folds, knots, lines, pits and bulges are exquisitely depicted. A three-dimensional effect has been created by shading the tree trunks. Interestingly, notwithstanding the form of the upper part of the tree which is predominantly stylish, the small branches are frequently treated in the fashion of the trunk. An apparent similarity in their forms may well have been the reason of this approach. However, considered individually, this kind of treatment of branches exhibits an interesting tendency towards adopting the technique of realistic expression in Mughal art. In a more phenomenal way, this development is comprehensively observed in the treatment of tree-trunks and dry and naked branches (for instance, in ff. 283-284 of the *Bāb* [BM]).

A very typical feature of these paintings is the stylized form which the leaves retain despite variations in distance, positions and significance in relation to the other objects on the canvas. Each leaf must be represented

[4]*Razm*, pl. 19 (Baroda), pls. 16, 46, 60, 64, 65, 71, 91, 135 (Jaipur); *Bāb*, pls. 53, 59 65, 67 (Moscow), ff. 306, 379, 390, 398 (BM).

(The lotus is always drawn in its realistic form and colour. It may be represented half or fully bloomed in a group with buds and leaves on the surface of the water. A fully bloomed lotus appears like a disc divided into several petals of equal dimensions. The petals are drawn like a pointed leaf, though in a few instances its stylised form has been employed. The petals drawn in a curve in a circle form an ornamented lotus. These curves are rhythmic and produce an effect of circling movement. The red lotus fascinated the painters.)

[5]Motichandra, *op. cit.*, p. 53.

with the maximum of detail, whether it grows on a plant or hangs from a stem on the top of a tall tree. The entire crown of a tree would be shown full of leaves. The two surfaces of a leaf are distinguished by tonal variations in colour: the upper surface is painted darker, in conformity with nature. The stylized form of the leaves—in the pattern of a flower with many petals—also belongs to the pre-Mughal Indian tradition. Such a depiction of foliage may be seen in several Rājpūt miniature paintings.

Trees drawn single or double with a few leaves and branches full of flowers (each with five or six petals), beside a cypress-tree reflect the influence of the Chinese *qalam*, already adopted by the Persian painters. The composition of these trees fascinated the artists. Outdoor scenes usually have trees which are also used as motifs of decoration. A single flower with five petals was an equally favoured motif.

The trees in the illustrations are closer to nature and more varied than in contemporary Persian miniatures and pre-Mughal Indian art. The study of trees in their purest forms is shown by the illustrations contained in the *Bāb* (Pl. XXII).[6] These represent a great variety of trees described by Emperor Bābur in his *Memoirs*.[7] The trunk, leaves, fruits, flowers, etc., help to distinguish a plant or a tree, though it is difficult to distinguish their species. The *chīnār*, *kamrakh*, *jāmun*, mango, pomegranate, *kirnī*, *badhal*, *ber*, *paniala*, orange, lemon, citrus, *sangtarā*, *sadāfal*, *amrūd* and Indian palms—*chirunchi*, date, etc.,—are among the more commonly painted.

HUMAN FIGURES

The illustrations are studies in action rather than in character. The emphasis is on the description of themes, wherein human figures appear as persons but do not always emerge as personalities. The thematic overtone of each of these illustrations is thus the determining element of the character of the art itself. With an array of colours, a set of conventional lines and a few types, the artist manages to justify his claims to virtuousity. He is bothered by no demands of naturalism and the gravest of his errors go undetected by the connoisseur, himself trained to want nothing better than clarity in the execution of the conventional media. The function of anatomy in art, the geometry of postures, the rules governing visuality, the intuitive perception of proportions, the diminutive impact of distance, all escape his attention.

Action is directly reported through lines, a technique that is of fundamental significance in sketch drawing. In colour painting, it is one of the requisites which go side by side with the correct judgement of muscular adjustments during action. A skilful artist uses the two techniques to the

[6]*Bāb*, pls. 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63 (Moscow), ff. 398, 399, 400, 401, 403, 404, 405, 406, 507 (BM).

[7]*Bāburnāma*, tr. Beveridge, II, pp. 503-513.

maximum advantage when he is able to visualize the degree and nature of the participation of each muscle of the body in a particular action. The degree of perfection of representation is thus directly proportional to the extent of coordination between observation and technique. It is exactly here that the Akbari artists display a different attitude. Their attention is concentrated on those parts of the body which are directly involved in the action—the rest of the body is painted in a neutral attitude. A certain direction of the head, or an angle at which the hand is to be lifted or stretched was, for instance, considered sufficient for depicting a posture. The apparent reason for this lack of coordination appears to be the fact that for each set of motions, as for each part of the body, the artist depended for expression on formulated lines and angles. One may go on turning leaf after leaf without finding the slightest change in the direction and form of the feet, which are depicted flat and mostly turned to one side (Pl. XXIII). The feet are generally covered with shoes. Bare feet are seldom shown, and sometimes instead of the toes there is just a flat curve. This style proclaims its affinity to the Persian *qalam*. The anatomy of the foot has rarely called the artist's attention. On ff. 49, 201 and 245 *Akb* (CB), Akbar is shown sitting on a throne with one leg folded, so that the sole is visible. The artist has successfully drawn the curvature of the sole with the details of toes. This is a rare example which associates the drawing with Ajantā art.

Half of the body from the waist downwards is a type, a component of the figure that remains usually indifferent to the changing postures of the upper half. Not uncommonly one comes across figures, the different parts of which would seem to belong to different situations, e.g., legs in profile, body in the front view, face in profile, semi-profile, three-quarters profile or just the rear view. Nevertheless, the artist is not entirely unmindful of the attitude and identity or unity of the subject. As Hajek has pointed out, this unity is not quite dissolved, but remains incomplete.[8] Foreshortening is completely missing from the technique.

The figures are usually standing in full stature, or sitting, with hands folded on the chest or resting in the lap. In scenes of hunting, war and feasts there are minor variations in posture. A figure is shown bending over, usually when engaged in a variety of chores. Violent action is peculiar to battles, expeditions and hunting scenes.

The bodies of men and women are all covered with loose garments, leaving only the face, the hands and the back of the feet bare. Half-naked figures[9] are rare, and nudes are totally absent, though the latter may be

[8]Hajek, *Indian Miniatures of the Mughal School*, p. 32.

[9]*Akb*: ff. 12 (elephant-drivers), 148 (two men holding long shields), 153 (labourers), 263 (an old man in the lower margin), (CB), pls. 13 (boatman), 22 (boatmen), 39 (elephant-drivers), 43 (attendants holding torches etc.), 45 (labourers at work), 46 (labourers), 61 (saints), 62 (saints), 66 (labourer), 78 (a begger in the lower margin), 82 (labourers), 83 (labourers), 85 (fishermen), 86 (labourers), (VA); *Tā'rīkh*, ff. 17 (boatmen), 51 (boat-

seen in contemporary Persian art.[10] The study of anatomy hardly held any relevance for the artists. The half-naked bodies of the sailors, saints and fishermen provide us with the only examples of their knowledge of anatomy. As it is, these figures are more or less devoid of any display of muscular action. In some cases, it is difficult even to see where the knee is positioned in a bare leg. Muscles are rarely emphasized, action usually being shown by outlines. Sometimes, though, the ribs and muscles of the chest and back are depicted.

The garments are drawn in set proportions, sometimes without any consideration given to the body. The exposed parts of the body are shown emerging from the clothes, without any continuity to the limbs concerned. This has often resulted in a disproportion and imbalance in the figure.

Human figures represented in the illustrations can be divided into several categories. These are the common people, the nobles, the ladies, and the king and his near relations. The difference is expressed by means of external characteristics, like costumes and the positioning of figures. As a rule, the common man is drawn as a type, having no individual identity. The face, the hands, the bulk and stature remain more or less the same everywhere. Distinction among them is, however, made by dress. A personal attendant of a noble, and a shepherd or boatman are recognized because they wear no headgear, or sometimes because of the simplicity of their garments, or their half-naked bodies. A further mark of distinction is the nature of work performed by a person.

The only instance where the artist is bound to maintain the individuality of the subject is in the person of the king, his near male relations and some of the courtiers. In this case, the artist depends on some standard lines, the positioning of the figure, costumes, ornaments and the lay-out. It seems that the face of Akbar[11] is not entirely similar everywhere. His profile[12] or three-quarter view[13] both have attracted the artists, more so the latter. In the *Bāb* illustrations, the artist is assisted by a few set lines when drawing Bābur—an oval face with a small pointed beard, ornamented costumes and the prominence of place assigned to him in the composition. Bābur's face is also not be entirely identical[14] in all the paintings. His

man), 89, 101 (boatman), 322 (saints), (Patna); *Dīwān*, ff. 74, 211 (Rampur); *Bāb*, ff. 6, 44, 190, 204, 333, 370 (BM). (In the *Razm* illustrations, male figures are mostly drawn half-naked—the upper part of the body is only partly covered with a *doshāla*.)

[10] *Khamsa*. (A few illustrations from it have been published in Kubickova Vera, *Persian Miniatures*, pls. 22 and 24.)

[11] *Akb*, ff. 25, 147, 157, 201, 245 (CB), pls. 15, 20, 27, 54, 65, 81, 83, 85, 93 (VA); *Tā'rīkh*, f. 331 (Patna).

[12] *Akb*, ff. 25, 32, 122, 157, 248, (CB), pls. 9, 17, 21, 22, 23, 40, 52, 54, 67, 75, 77, 92, 93, 97, 99, 106 (VA); *Tā'rīkh* ff. 322, 323, 331 (Patna).

[13] *Akb*, ff. 1, 6, 19, 27, 49, 54, 147, 169, 201, 295, 263 (CB), pls. 14,15, 20, 24, 27, 39, 41, 50, 58, 60, 61, 65, 79, 81, 83, 84, 85, 94, 110, 113, 114, 117 (VA); *Dīwān*, f. 19 (Rampur).

[14] *Bāb*, pls. 2, 8, 10, 16, 18, 19, 21, 24, 33, 68, 69 (Moscow).

figure is usually portrayed in the three-quarter view;[15] the strict profile is rarely found.[16] The main figures, that is, the emperor, a prince or a general, are usually drawn in three-quarter view.

Slight variations in the colour of the flesh are shown in a single personality. Akbar's face has been treated in varying shades by different artists.[17] The same is true of Bābur's in the *Bāb* paintings, where, in several examples, he is shown to be of dark complexion.[18] To ascribe this irregularity to lack of skill would certainly be wrong. The artist had such few conventions to follow, one can be almost certain that the differences in colour were deliberate. And evidently, in creating a particular identity, more importance was attached to the contours of the face.

The face is oval or round or sometimes pointed at the chin; features vary in proportion to distinguish one face from another. Often a small chin was set against heavy cheeks.[19] Shaded lines are employed in dark tones round the chin, sockets of the eyes, nostrils and ears in order to set off the features. The remaining parts of the face are drawn in a flat colour.

The eyebrow is drawn in a curve resembling that of a bow. The eyes are all according to a type: half-open, with full, upper eyelids, the looks directed below the eye-level. This is so regardless of the angle at which the person is painted. Eyes, opened wide, are very rare. The Mughal painters have shown their originality in the representation of eyes. The bow-like eyebrows differ from the Ajantā, Ellorā and Jaina painting, and also

[15]*Bāb*, ff. 83, 84, 94, 128, 133, 180, 181, 274, 295, 306, 347, 468, 478, (BM), pls. 16, 8, 10, 11, 14, 15, 16, 17, 19, 20, 23, 26, 29, 32, 33, 35, 65, 68 (Moscow); *Tā'rīkh*, ff. 246, 248, 252, 253, 254 (Patna).

[16]*Bāb*, f. 468 (BM).

[17]*Akb*, ff. 122, 176, 248, 263 (CB); Akbar's face is painted pink, or pink with a tinge of brown, or yellow, or a dull pink. The originals of *Akb* (VA and CB) are not accessible to us; therefore, the study is based on modern coloured reproductions; Akbar's face represented in the *Tā'rīkh* (Panta) on ff. 322, 323 and 331 varies in tone of colour.

[18]*Bāb*, pl. 17 (Moscow), ff. 35, 128, 256, 305, 459, 478 (BM). Rai Krishnadasa is inclined to believe that Bābur had a slightly dark complexion. His conclusion is partially based on f. 205 of the Delhi manuscript which has been reproduced in his book, *Mughal Miniatures*, and on some other paintings not specified by him. The darkish complexion shown in these paintings cannot, however, be taken as a sufficient evidence. In fact, the colour in these portraits is too dark to belong to a prince whose father and mother were of Timurid descent and of a pure race. In fact, in the majority of paintings Bābur's face is depicted in pink. Even in the works of a single artist, his face has been differently coloured.

The reason for these depictions, however, is difficult to find. Perhaps it should be ascribed to the painter's caprice. It is significant that all the paintings showing Bābur's complexion dark are Hindu artists' works (with the exception of Khizra *Chela*). It is possible that the Hindu painters were trying to idealize the complexion according to the native Indian fashion where the gods, especially Krishna and Rama are depicted in dark tones.

[19]In the Persian style also, both the male and female faces were drawn heavy with large cheeks, making the face round. However the Mughal artists preference for elongated eyes and round faces with heavier cheeks could be a variation of the style represented in Ajantā art.

from Persian style. In Mughal painting the eyebrows were much more prominent. The tradition of drawing the upper eyelid heavy, and slightly elongated eyes[20] (especially in the faces of women) affiliates the Mughal style to the Indian tradition. In a few instances,[21] in the depiction of one, and a quarter or three-quarters faces, the second eye is drawn protruding slightly beyond the outline of the face. The upper lid has become more curved and heavy; and the eyeball is invariably shown at the extreme outside—a tradition different from the Persian style and a variation of the Jaina painting in which the second eye is invariably drawn projecting outside.

Faces are painted in three-quarters or in profile and rarely in one and a quarter profile (Pl. XXIV). The rear view of the head is sometimes seen in congregational and war scenes. The Mughal painters preferred the three-quarters view—a convention of Persian painters.[22] In the central figure, where a resemblance was important, the three-quarter face was drawn. With the fusion of the Persian and pre-Mughal Indian traditions, certain changes occurred in medieval Indian painting. The tradition of representing the protruding eyebrow and eye was discarded, although this was not the last phase in the representation of human faces in Mughal art. With the development of the Mughal school, the practice of drawing figures in three-quarter view was replaced by the strict profile.[23] Nevertheless, this change had started taking place during Akbar's reign and the strict profile was sparingly employed by the artists.

While painting facial features minutest details were observed; each hair was separately treated for moustaches and beards. The outline of the face was usually rounded, regardless of the age of the person. An old man is thus distinguished not by the his face but by his white hair or bent back. Rarely, in the case of a few commoners or beggars we find depressed facial muscles alongwith a bent posture and lean and thin bodies. Bold and deep outlines express the forms of various parts of the body.

For depicting subtler ideas, such as emotions, moods, age and the circumstances of misery or happiness, the artist had to be content with the use of some symbols drawn from bodily gestures and postures. A bent waist, a white beard and a staff, are all that are needed to make a figure look old. Tense eyebrows are a symbol of anger. Surprise is depicted by the forefinger resting on the lip. Fright is symbolized by wide-open eyes. The rest of the body remains unaffected by the emotion sought to be captured—each symbolic gesture remains isolated. The Akbari artists have a rich variety of such gestures and use them cleverly.

The Mughal artist had their own ideas of the proportion of the human body. Much care was taken for maintaining correct proportion, height and girth, though details of the body were secondary compared to those

[25]Motichandra, *op. cit.*, p. 92.
[21]*Akb*, ff. 1, 19 (CB); *Tā'rīkh*, ff. 6, 32, 26, 51, 246, 284, 331 (Patna).
[22]Motichandra, pp. 57, 61.
[23]*Ibid.*, p. 62.

of the face. Motichandra[24] has tried to determine the proportions of the body generally used in the Mughal *qalam*. His measurements, which are approximate, seem to have been taken from portrait paintings and exhibit a fairly good knowledge of the human physique. These measurements do not, however, apply entirely to the Akbari illustrations. The proportions vary from painting to painting and for one, it is difficult to find out the set proportions of the body. Broadly speaking, the body, waist upwards, is generally shorter.[25] The proportions established are 1:1.3, or 1:1.2, or 1:1. In a few instances, the position is reversed and the part of the body above the waist is longer than that below.[26] In the standards given by Motichandra, the case is a bit different. He has divided the whole body into eight spans and the face measures one span. The navel—on which the *paṭkā* is girded—falls on the third span, dividing the full figure in the proportion of 3:5, i.e., 1:1.66. The facial proportions given by him[27] are also better than those found in the illustrations. But this can be judged only by close observation. The figures are too small to be correctly measured.

Similarly, in the figures of ladies, the body below the waist is longar than that above.[28]

Ladies are infrequently though exquisitely depicted in the paintings. The lady is also a type. With the help of slight variations in the nose and the chin, a standard form seems to be repeated everywhere (Pl. XXV). The nose is invariably drawn longish, with a pointed or round tip. The faces are usually oval. A small round chin is replaced by a bulky chin. The eyes, the forehead, the lips and the rest of the face are drawn on set lines. The female face and the body carry a certain delicacy about it, but for distinguishing it from that of the male, the artist depends mostly on the clothes, hair and ornaments. These are also used to distinguish the status of one female figure from another as in pls. 1 and 32 *Bāb*, (Moscow), showing a princess with her attending maids. Examples of the same may be found in the *Bāb* (BM)[29] though there is a clear difference among the men. A striking example of this kind of formula-painting is

[24]*Ibid.*, p. 63.

[25]Our conclusion has been drawn after measuring several standing figures.

[26]*Bāb*, ff. 54 (figure shown with folded hands before Bābur), 208 (a noble standing before the king, dressed in a yellow *qabā*), 252 (a noble shown standing with palms resting on a stick, extreme right, above), 260 (standing figure, top, extreme left margin, dressed in a white turban and red trousers), 418 (a figure shown dressed in a crimson red *gadar*, top, centre group), ff. 2, 80, 83, 128, 163, 190, 199 (BM) contain other such examples. Similarly, in the Moscow copy of the same ms, six illustrations (10, 16, 18, 24, 25, 64) display the figures with the upper part of the body as longer. More instances may be seen in the illustrations of the *Tā'rīkh* (Patna), *Razm* (Jaipur), *Akb* (VA) etc.

[27]Motichandra, *op. cit.*, p. 63.

[28]*Tā'rīkh*, ff. 8, 40, 72, 205, 282 (Patna); *Razm*, pls. 5, 7, 19, 27, 116, 118, 127 (Jaipur); *Bāb*, f. 295 (BM), pl. 1 (Moscow); *Akb*, f. 143 (CB), pls. 8, 79 (VA).

[29] *Bāb*, ff. 13, 256, 314 (BM).

furnished by the figures of two ladies shown in ff. 13 and 256. These are different persons, but they bear a remarkable resemblance.

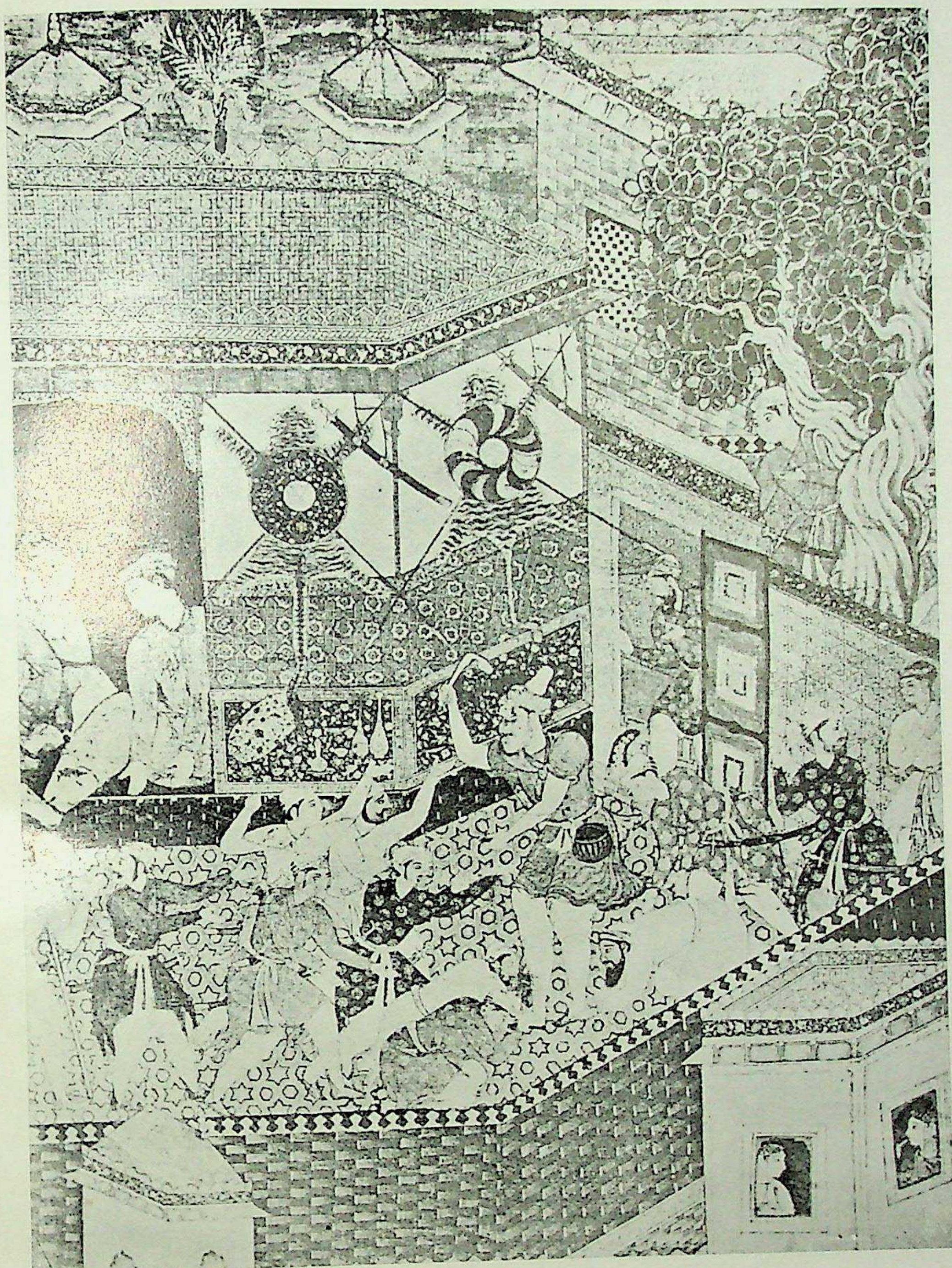
The same is true of common ladies. The facial lines of the three female musicians in a group shown on pl. 8 *Akb* (VA) holding castanets, *duhuls*, etc. are so similar that they appear to be sisters. This is also the case with the figures shown in the lower margin—a group of three ladies, two of them holding *dafs*, and the dancers. All these figures may be taken as three different types which imply basically common standards : curved eyebrows, long eyes with heavy upper lids, long noses, a clearly distinguished round chin and thin, small lips composed within a full round or oval face. Similarly, the ladies belonging to different strata of society, represented on pl. 78 (*ibid.*), sketched by Kesū *kalān*, have a striking resemblance. In another work by the same artist on pl. 79 (*ibid.*) the female dancers and musicians are drawn in similarly set facial lines. In f. 143 (CB), there is a scene depicting rejoicing at the birth of Salīm. A musical party with female dancers and male and female musicians and a few lady attendants is shown at the centre. Here also the painter is assisted by the same lines and standards. The difference lies only in the skill of the artist. The style remains the same.

Ladies painted by Kesū, Khem, Jagan, Ḥusain *naqqāsh*, Lāl, Madhū, Moḥammad Kashmīrī, Sāhū, and Pāras in the *Tā'rīkh* (Patna) include royal princesses, female attendants, dancers, musicians, etc.[30] A number of female figures represented in f. 134 are identical. Similarly, ladies shown on f. 72 of the same manuscript are of a type. The central figures of a royal lady wearing a long cap, and attending maids wearing similar caps are stereotyped; so are the dancers. An unsigned painting on f. 40 displays ladies of different professions. The facial resemblance is striking. On the top part of f. 284, rhythmic figures of ladies drawn in a few lines and curves show the artist's perfection in representing postures and actions. Simplicity of form is the main characteristic of these figures. No doubt, monotony tends to rise out of the similarity in costumes, ornaments, headgears, and in the lines of the body and face. But it is partly relieved by the figure of a princess drawn in the European tradition—the deep shading, heavy folds in her clothes and the style of covering the head being reminiscent of Virgin Mary. In another instance, the treatment of Draupadi's *sārī* shown on pl. 10 *Razm* (Jaipur), with thick shaded lines and deep curves, is also indicative of the European technique of colouring in the Mughal *qalam*. The painters of the *Razm* (Jaipur) have drawn ladies in a strict profile,[31] though the depiction remains the same. In a few instances, the eyes have become wide. The face is mostly round, and the small, round chin is drawn with large cheeks.[32]

[30] *Tā'rīkh*, ff. 7, 8, 12, 40, 72, 104, 128, 134, 205, 241, 284 (Patna).

[31] Ladies are depicted in 28 illustrations: pls. 5, 7, 10, 13, 14, 17, 18, 19, 21, 27, 40, 41, 68, 72, 78, 79, 81, 84, 86, 92, 101, 116, 118, 121, 124, 125, 120, 127.

[32] Ladies' faces (specially profiles) are heavier than those of men. The painter increased the distance between the nostrils and the earlobes, to provide ample space for elongated eyes. (See also footnote 19 above.)



Pl. I



روز دیگر طوطی بعلاج رای مشغول شد و خدمت پسندیده کردن گرفت چنانکه
رای را بر او اعتماد تمام شد و اعتقاد کلی گشت و از ادویه و اشربه او نیمی زحمت
رای برفت یکروز طوطی آغاز کرد ای رای چون بواسطه من نیمی زحمت تو زایل
شد تو مرا در زحمت تمام مپسند و چون گناهکاران در زندان قفص مدار
پر و بال شکسته من از حجره قفص بیرون آر و مرا در صحن سرای خود بدار به

Pl. II

نخشبی بر تو وقف مخبر بود — خوش کسی کو بدهر نیکو بود

نیک را هیچ گاه بد نرسید — هر کرا او خوب کشت خوب درود

ای عورت تو ازینجا سلامت باز گرد و از کرده و گفته خویش توبه کن و شوی

مسکین را بعد ازین این نوع کارها مفرما که هر عملی را جزای است و هر

امروزی را فردای قطعه



Pl. III


با لشکر خود بجزیره آمد و بیشه را خالی یافت و مملکت را از کدورت
اغیار صافی دید بگذشت شام نکبت و صبح طرب دمید . کم شد خزان رنج و بهار طرب رسید

Pl. IV



Pl. V



Pl. VI


ای فلک با کلاه داری خویش
پیش قدرت کلاه بنهاده
زادمی زاد جون توسی یکرم
مادر روزگار نازاده
خواب خرگوش غور کین ترا
شیر ز هیچ روبه ماده
بنده باچند خر بطست امروز
جون خر اندر گلاب افتاده

Pl. VII



Pl. VIII



Pl. IX



Pl. X


سبعی آن شدت و صولت و درنده‌ٔ با آن عظمت و هیبت بقوت دل و همینه وی بازو بخاک
خون افتاده و غریو از چهار طرف برخاست دان اول سباع بود که آنحضرت به نفس
یس تحکک ان توجه فرمودند و نهیبای ان ببر را جمعی از جوانان و دلاوران
قترین رکاب حاشیه بودند بتیغ و تیر از هم گذرانیدند

Pl. XI


ز به بود بر داشته لاغر اینجای بگذاشتند و قراولان لشکر منصور بهزاره دشمن رسیده جمعی را گرفته آوردند
و معلوم شد که ایلکا توراغا فل دران صحرا الطلب قبیله از جای خود میگردد و همان لحظه شیخ علی بهادر و ایکو تیمور
بجانب او روان شدند و آنحضرت نیز بسرعت متوجه شد و تحرچی راه گم کرده دو روز نادانسته رفت و
روز سیوم آنحضرت با مراو شاهزادگان گفت که ما چون دور افتادیم یاغی شاید که خبر یافته باشد اکنون
صلاح در آنست که پیش راه دشمن بگیریم و با نیت امیرزاده عمر شیخ را از یک راه برابری امیر جلال حمید فرستاد

Pl. XII



Pl. XIII



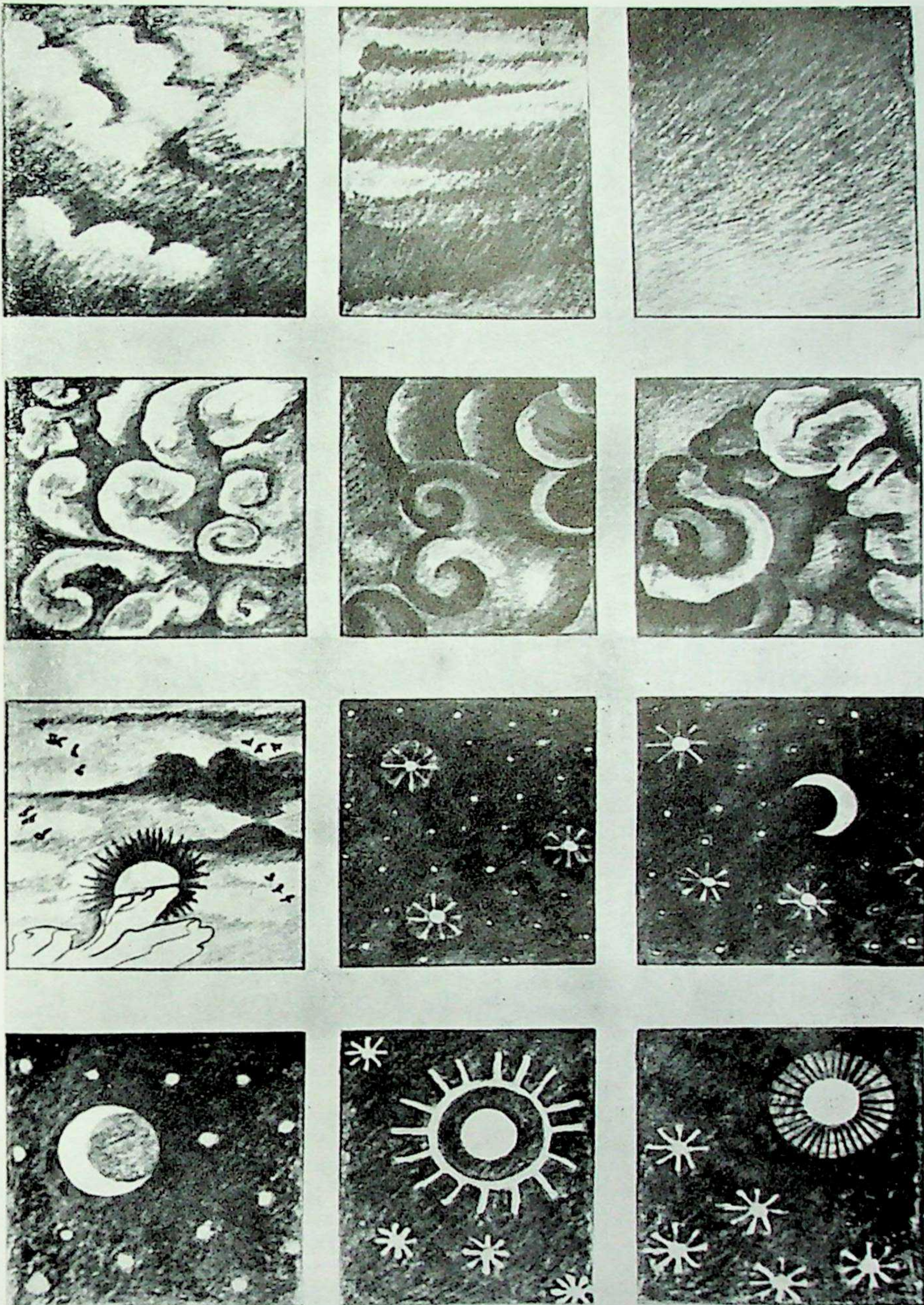
Pl. XIV



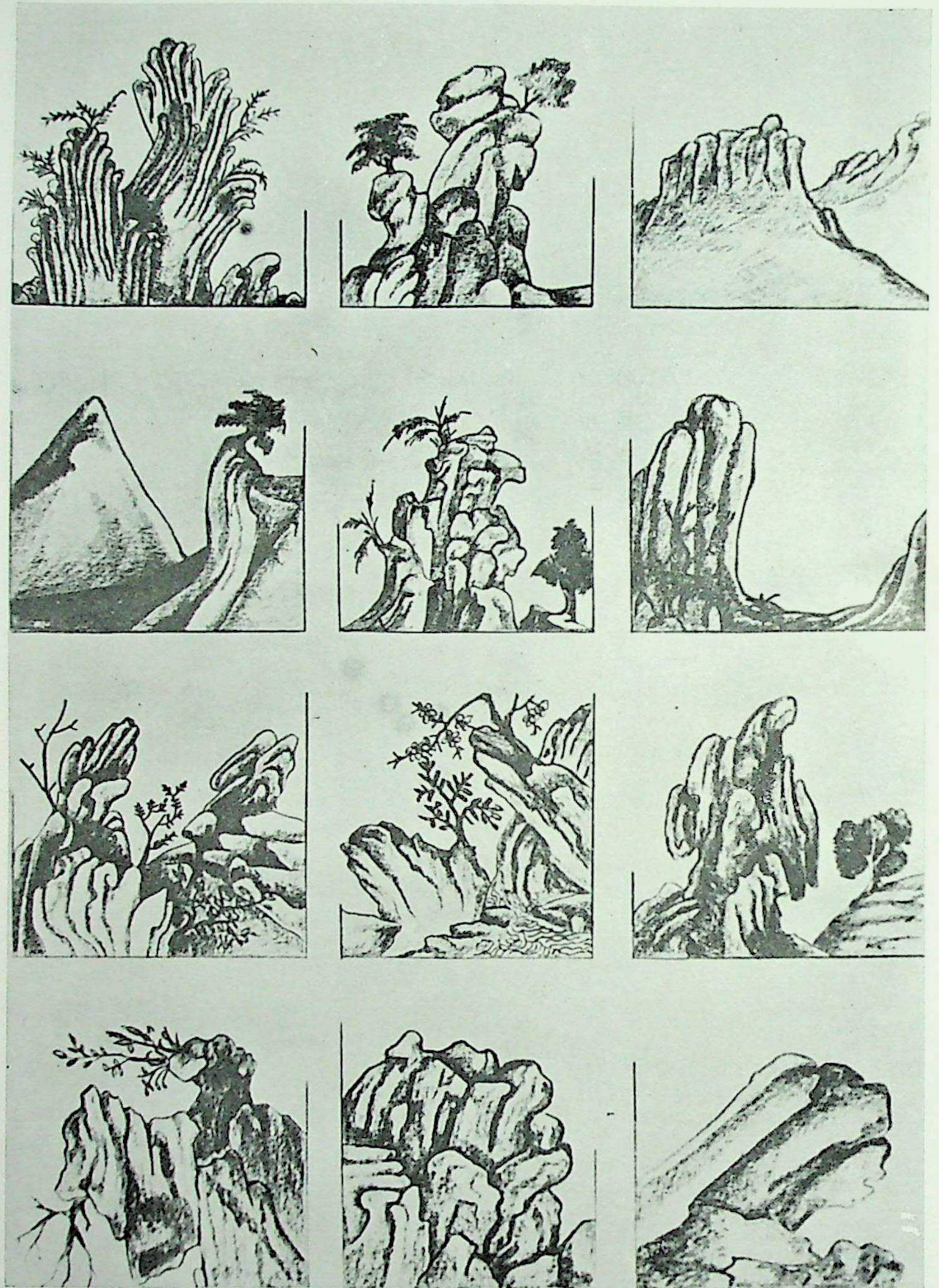
Pl. XV


ریان طناب پچیده می برانند طناب ہمان طور پیچیده و کاواک می بستند
بیلدور کارد در دست انداخته در پیش رویه جانورانی که می آیند گرزرا می انداز

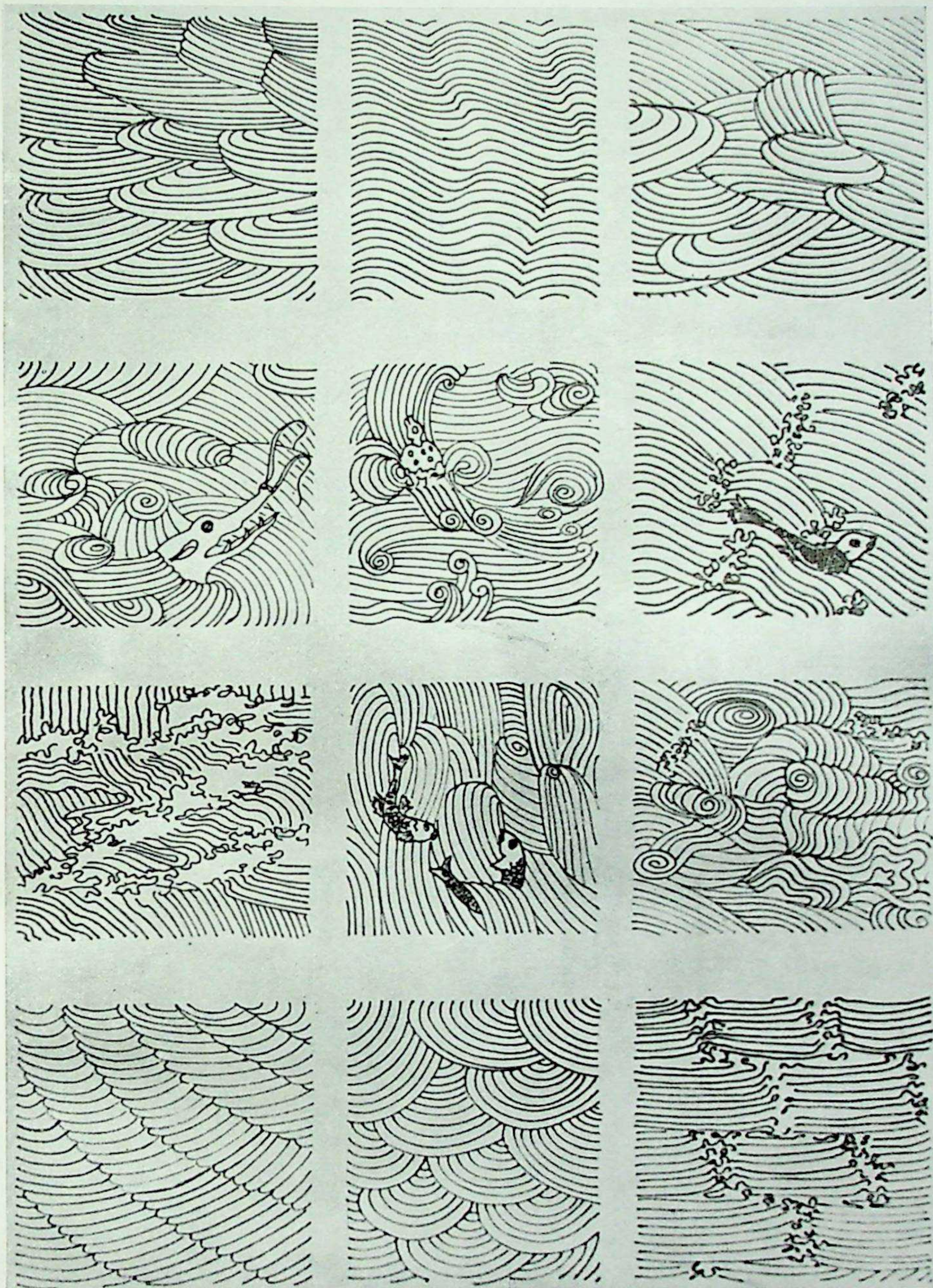
P.l XVI



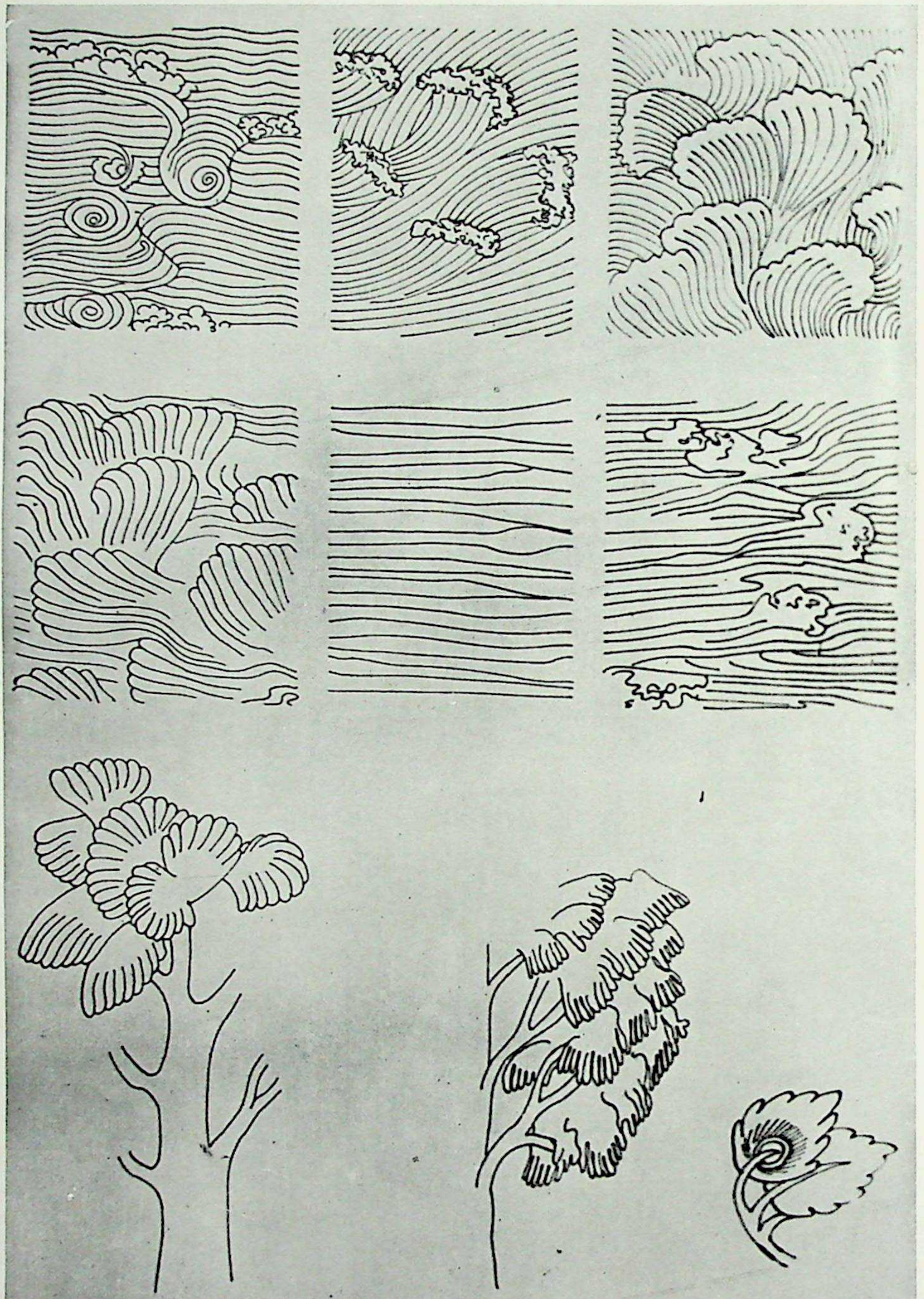
Pl. XVII



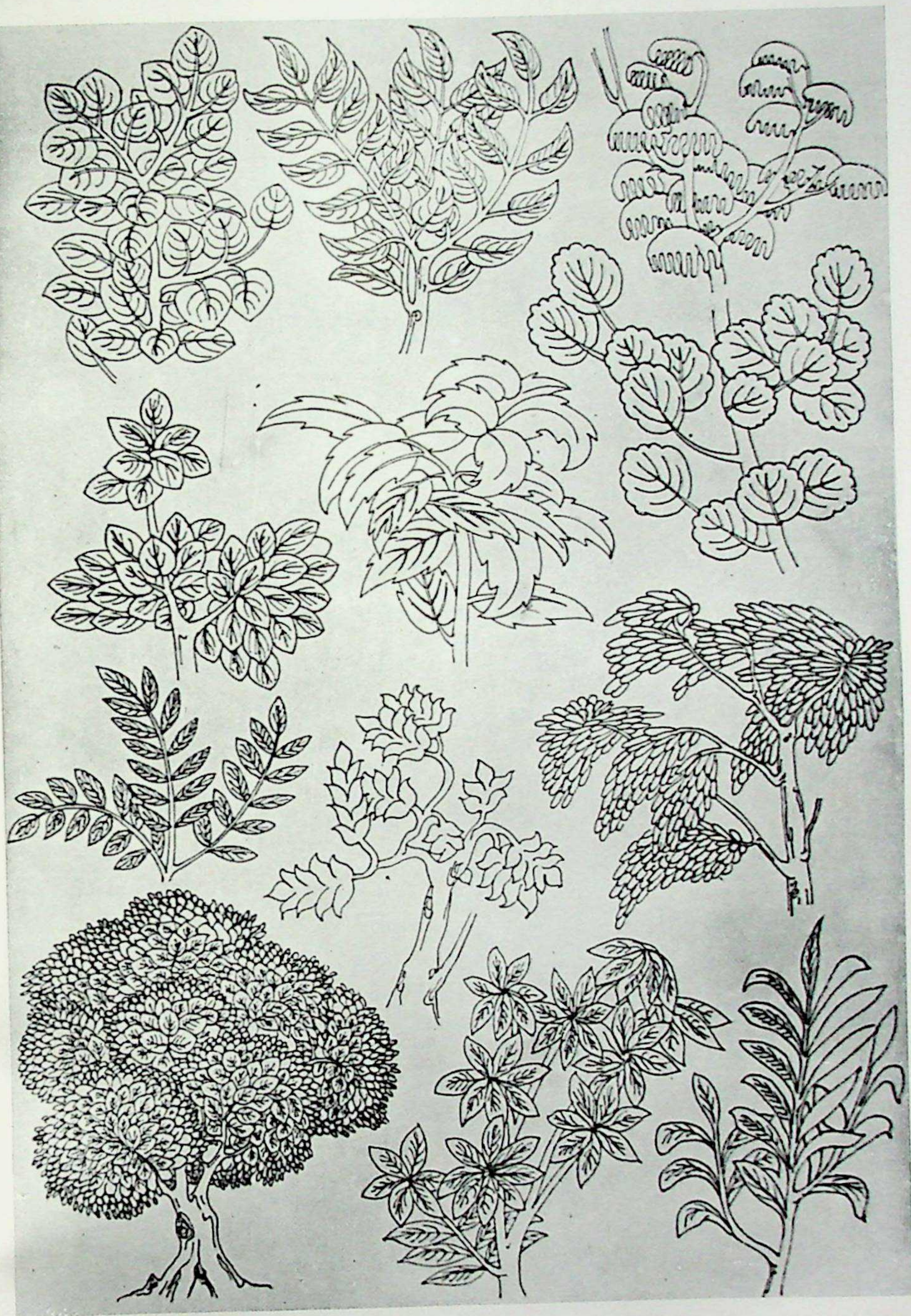
Pl. XVIII



Pl. XIX a



Pl. XIX b

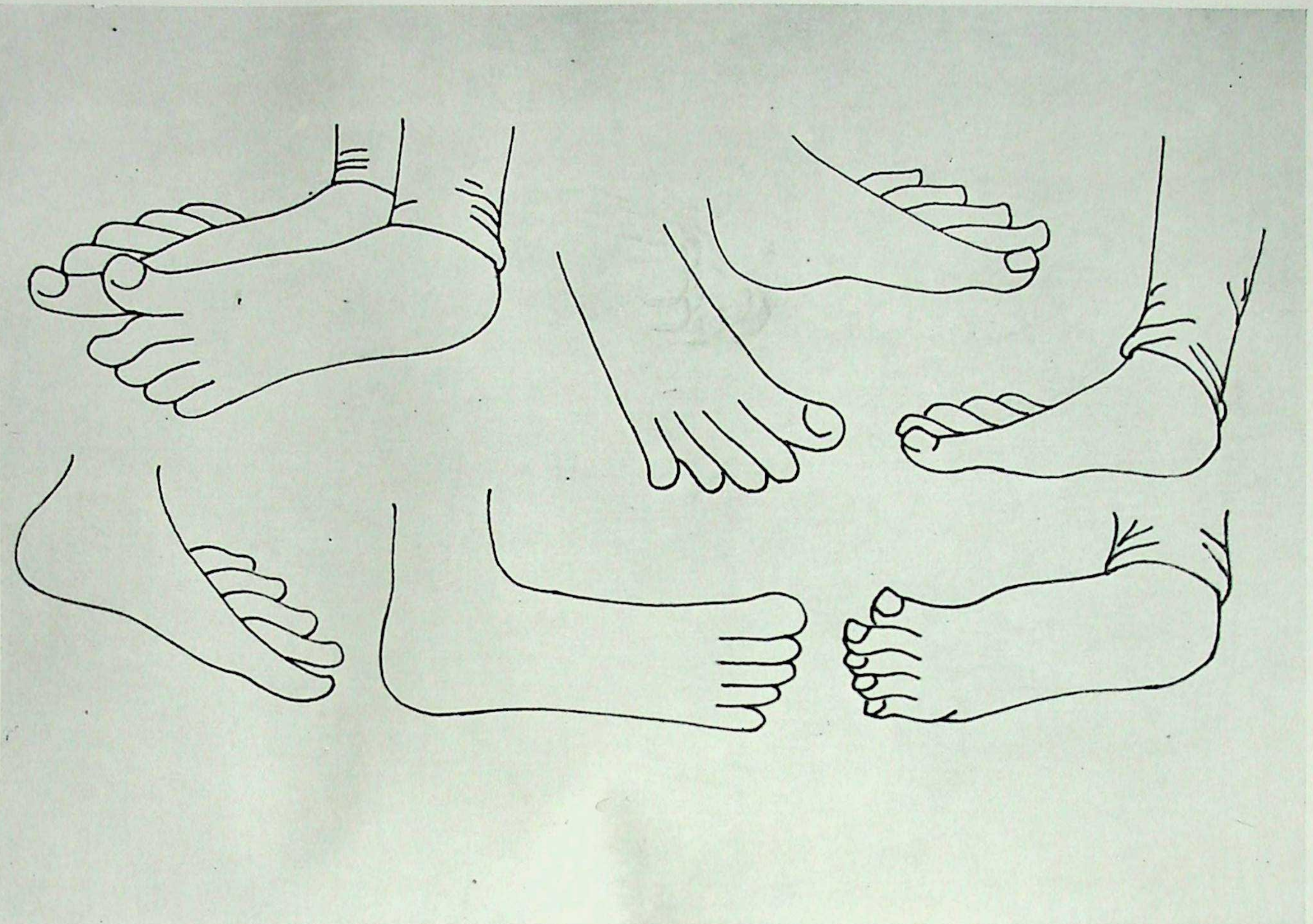


Pl. XX

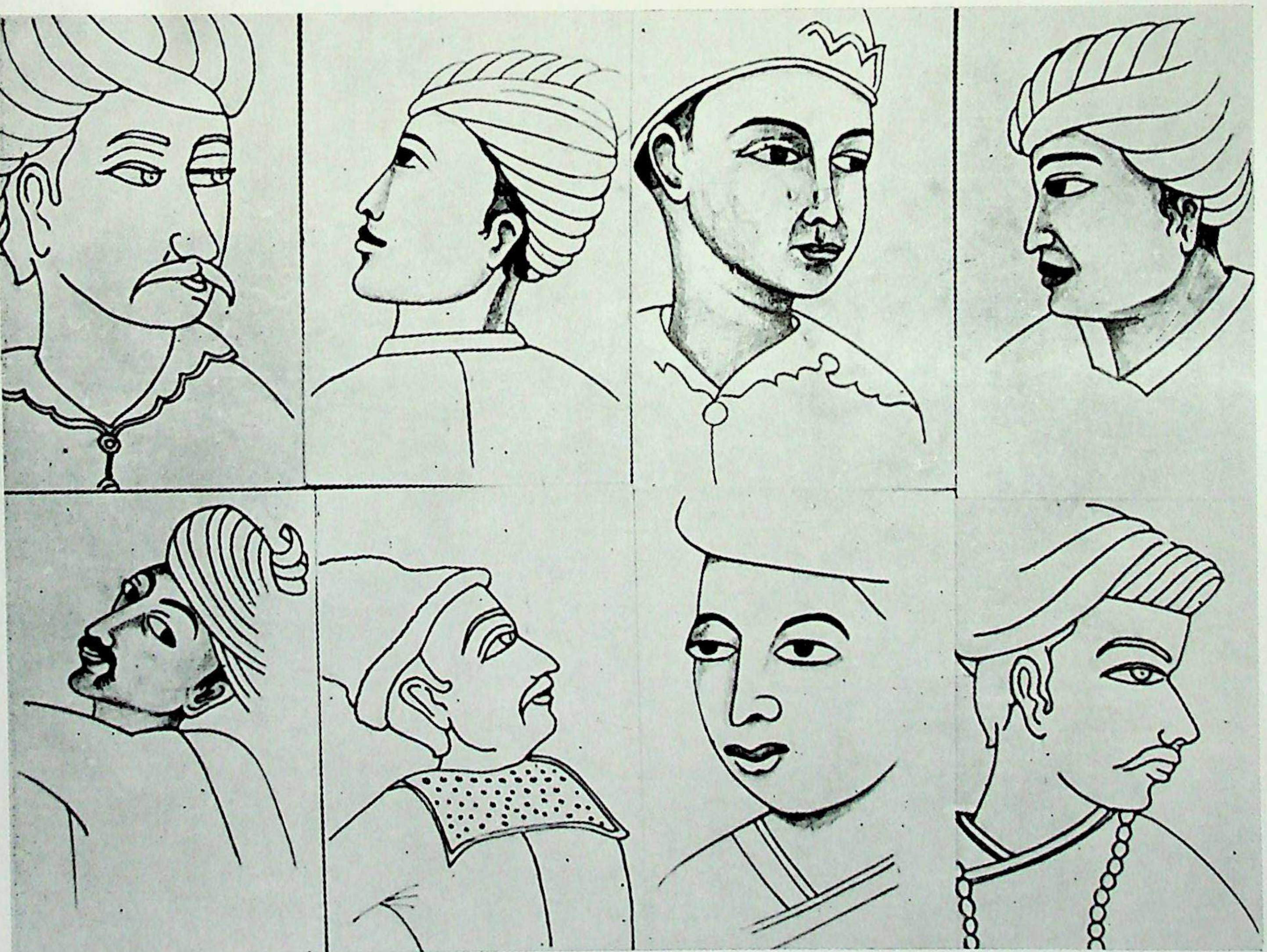


Pl. XXI

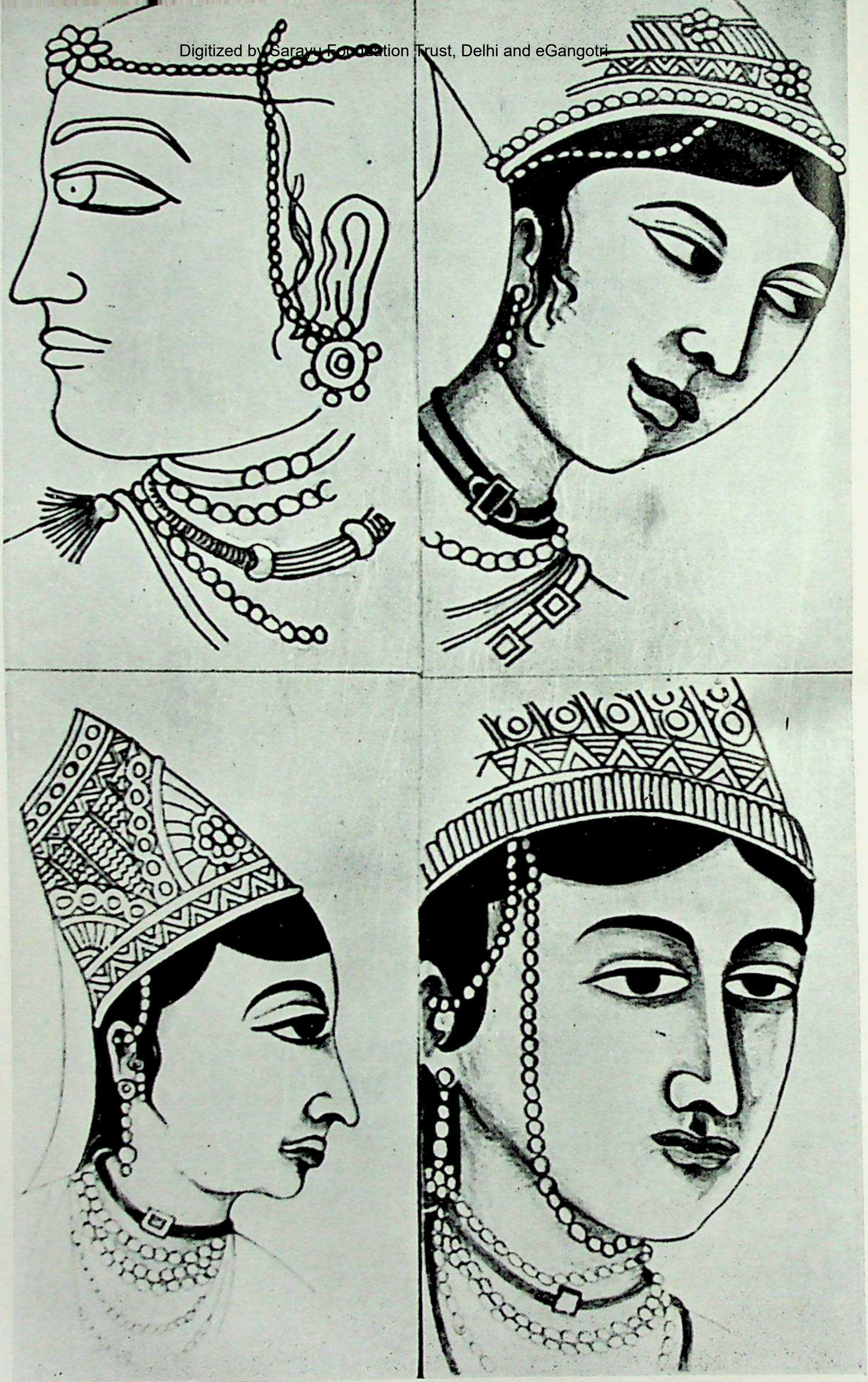
Pl. XXII



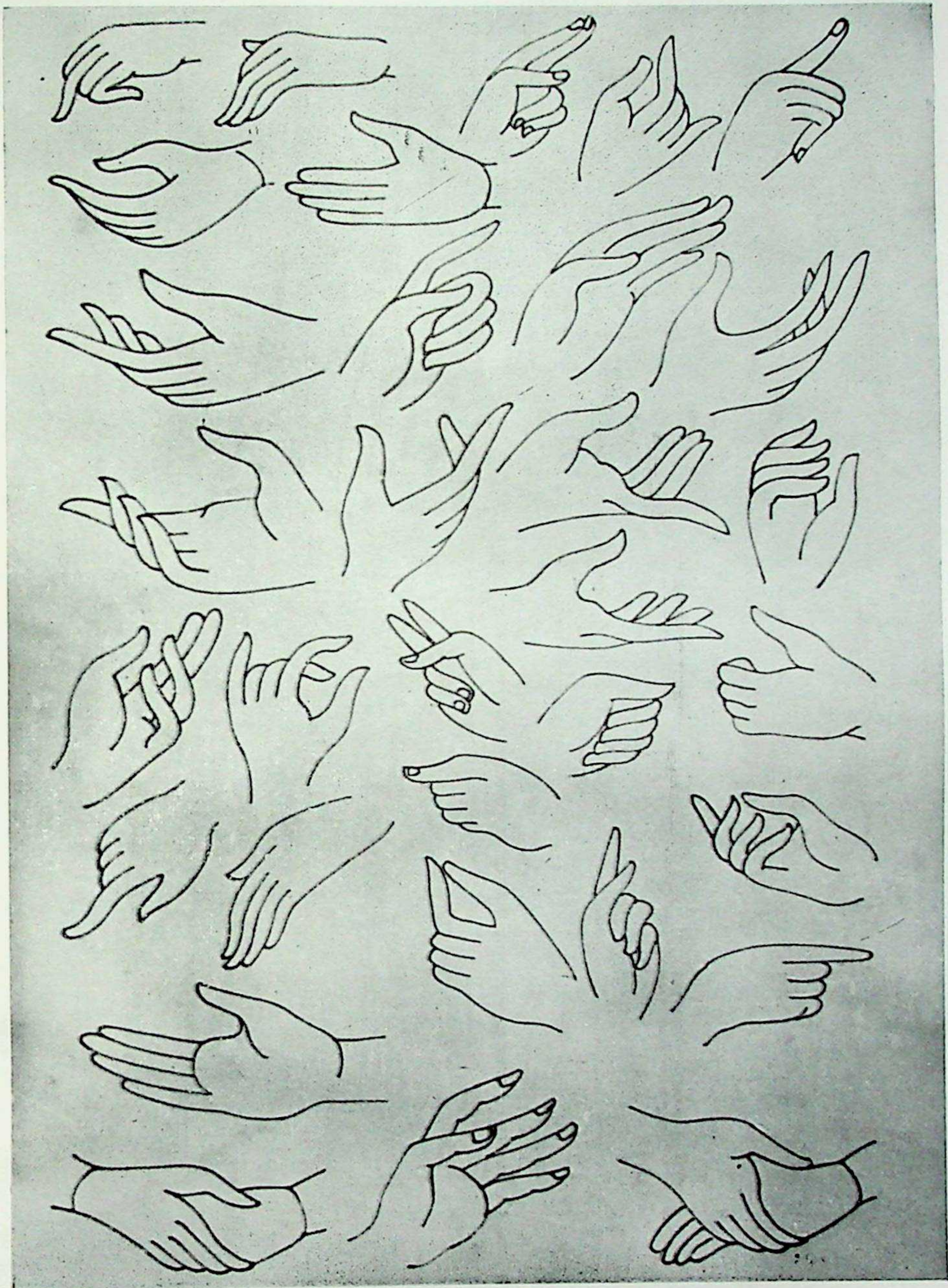
Pl. XXIII



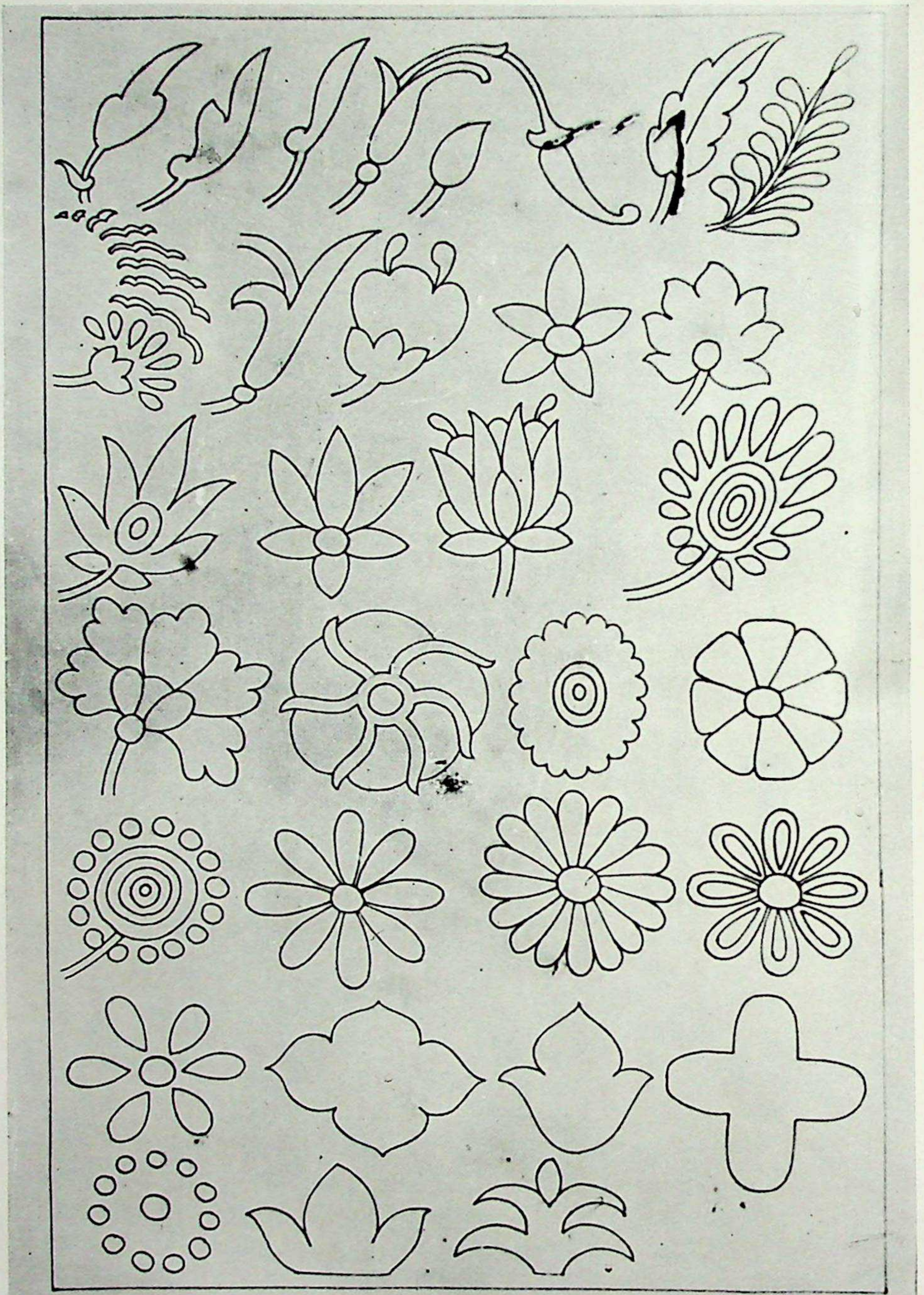
Pl. XXIV



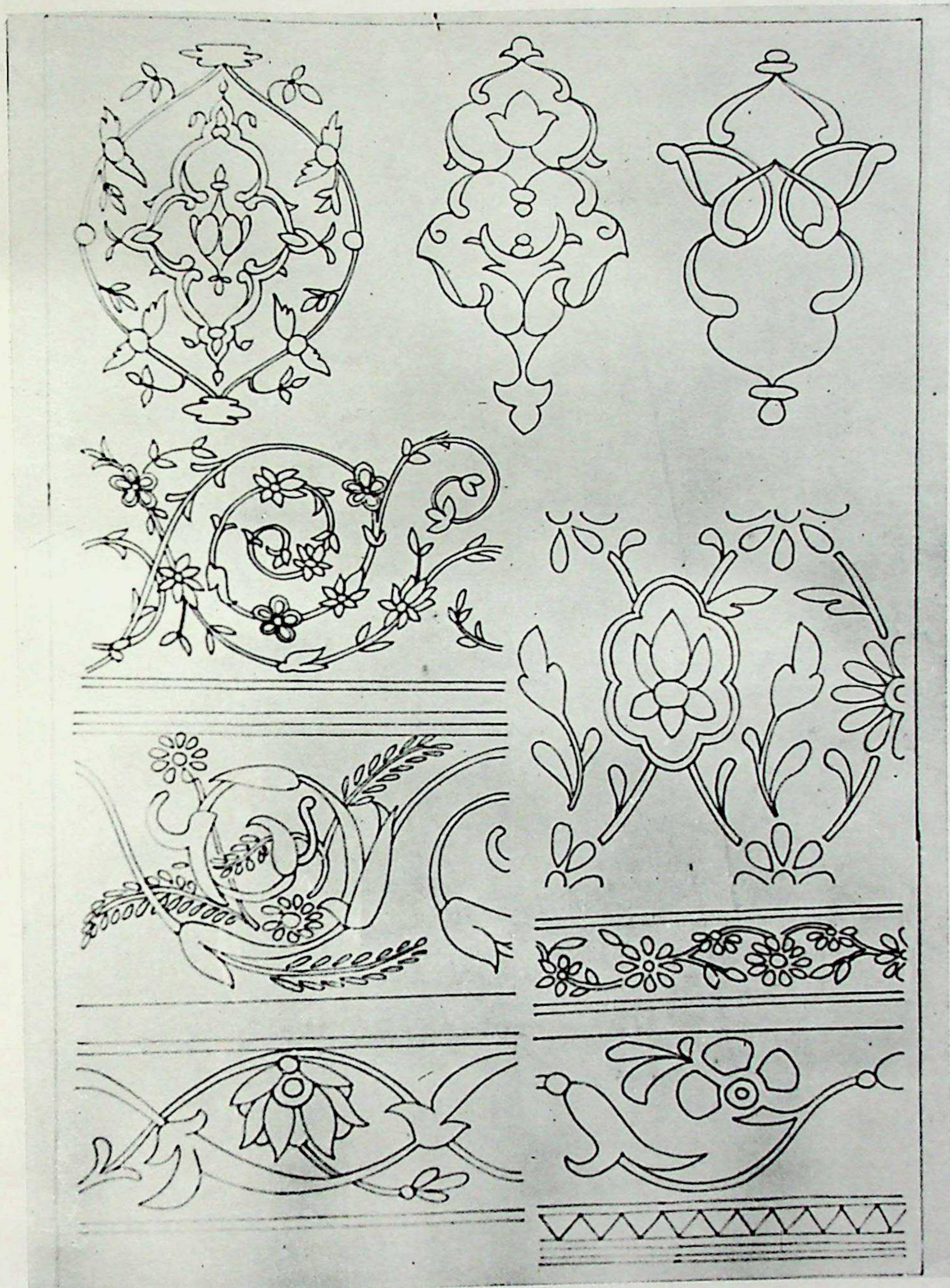
Pl. XXV



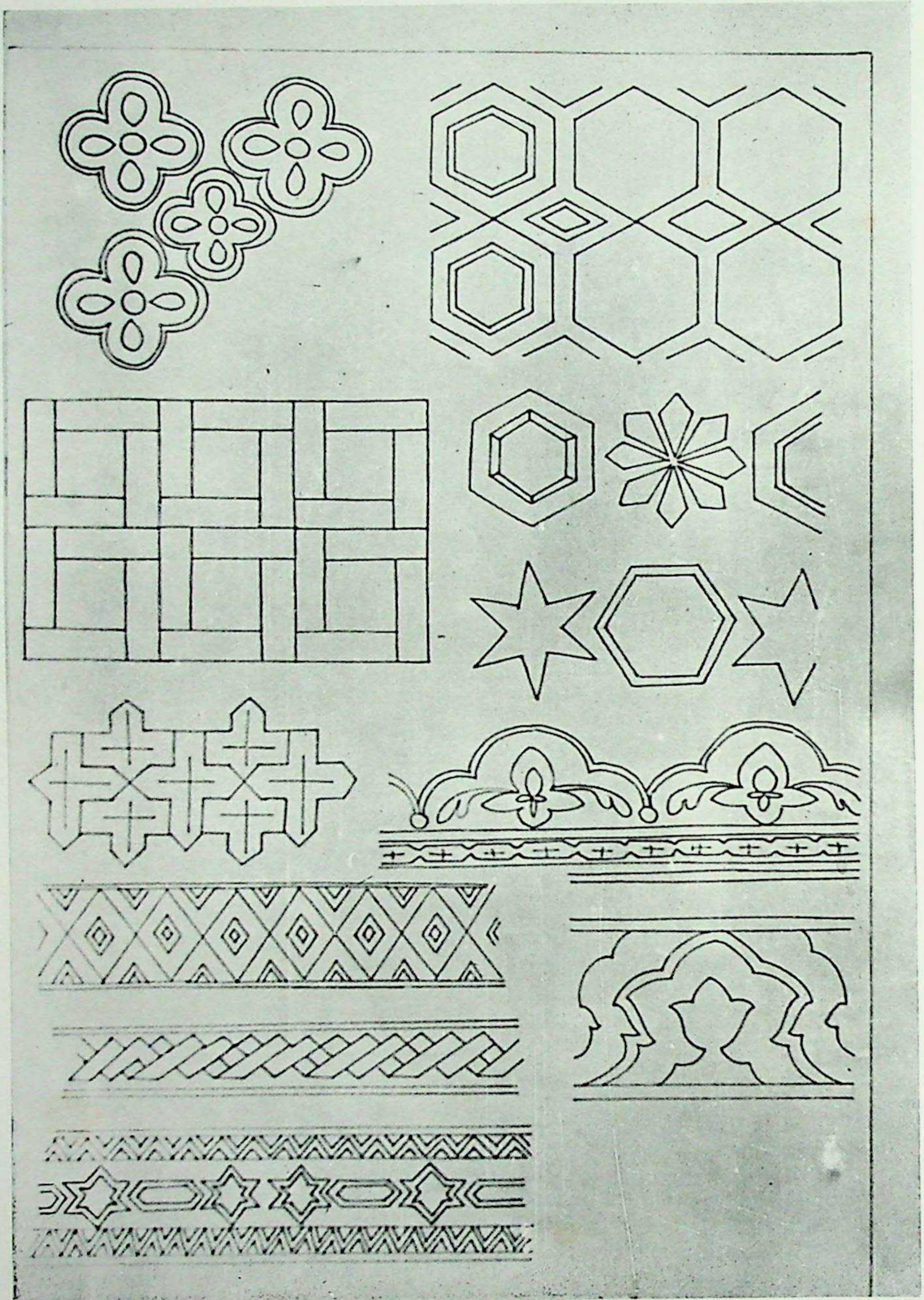
Pl. XXVI



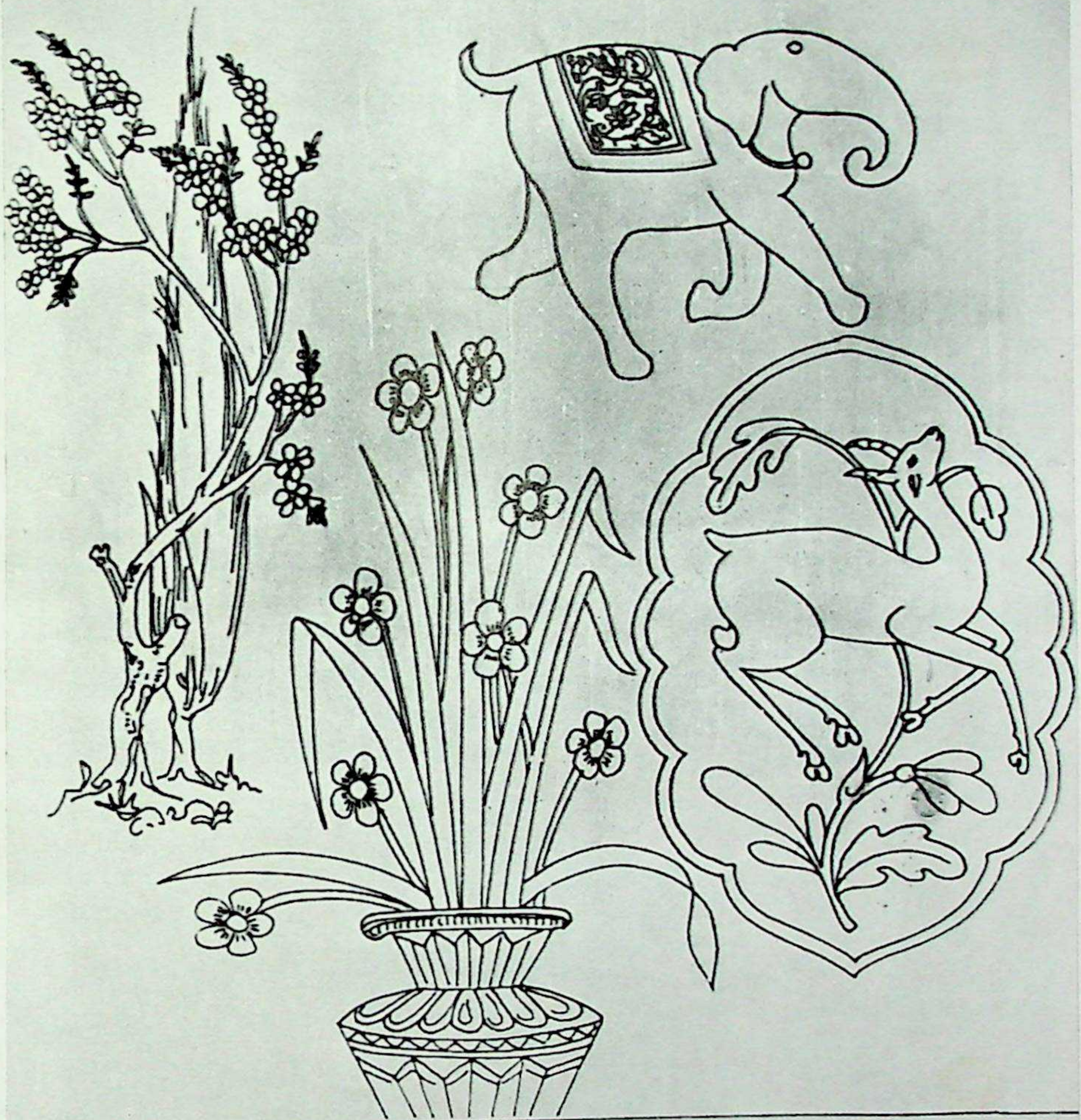
Pl. XXVII a



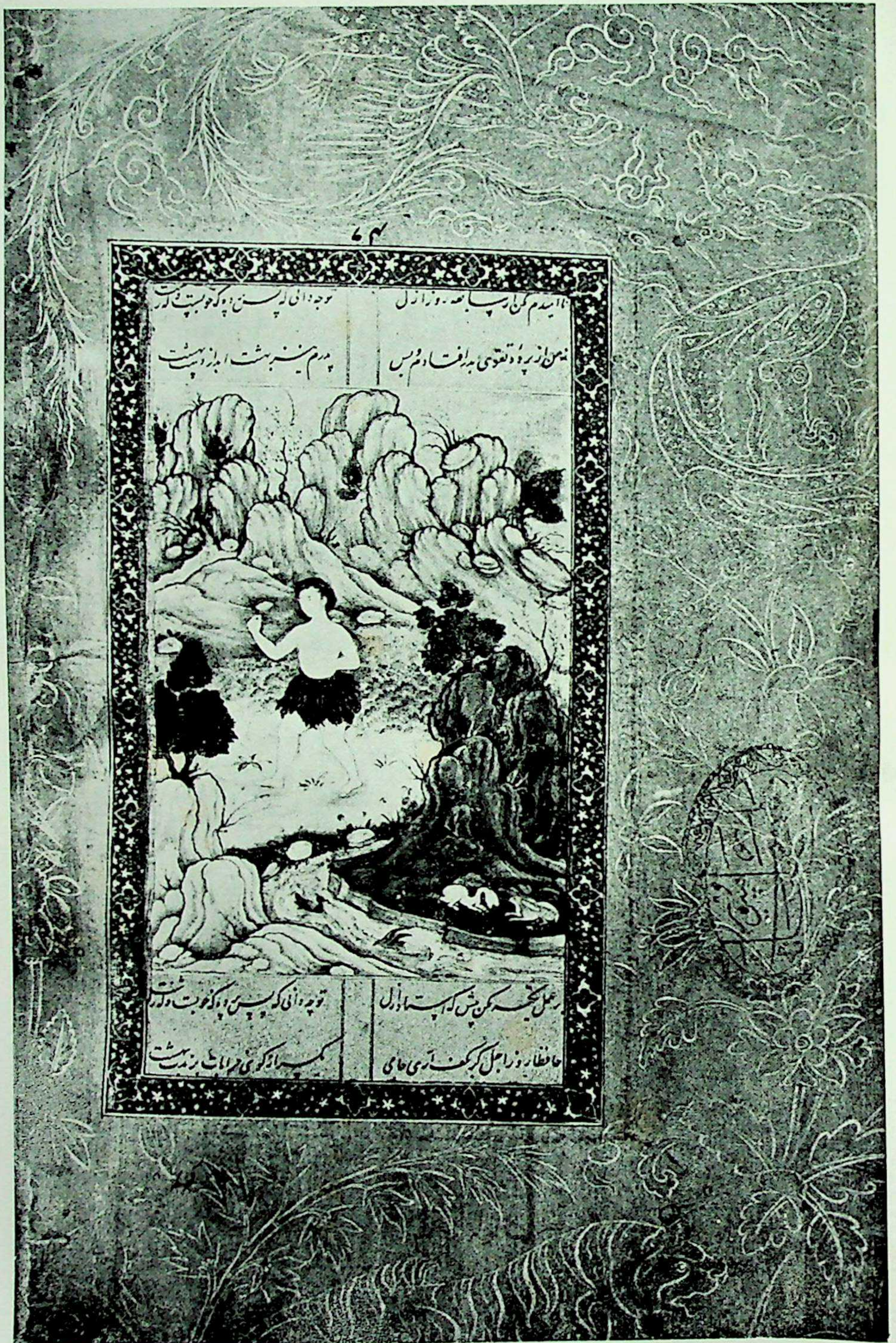
Pl. XXVII b



Pl. XXVII c



Pl. XXVII d



Pl. XXVIII

The full figure of a lady is also a type. These are directly drawn on the lines of a set formula—viz. a long slim body, a thin waist, a broad span of shoulders, high breasts, long hands with longish fingers, and generally, the part of the body above the waist shorter than that below.

The characteristic features of the ladies belonging to the nobility and the commoners are alike. The portraits of ladies depicted in the illustrations are not the record of actual likenesses. The artist had hardly any opportunity to see the subject of his portrait and under the circumstances he depended on his imagination and the conventional lines for the ideal to emerge. A few characteristics in the treatment of women appear to have been borrowed from the Indian tradition.[33]

But the Mughal painters were not mere imitators; the identity of the Mughal school remained distinct. In the *Razm* paintings, only in three instances are winged human figures represented. These seem to have been borrowed from the angels in European paintings, especially the round heads with short, curly hair, muscular bodies, thick, shaded lines and wings on the back. The three-quarter faces, expression depicted through lines and the treatment of the wings show the originality of the Mughal artist (pl. 16 *Razm*, Jaipur). Two other paintings depicting angels in a garden and in the sky, are identical to their European counterpart (pls. 19-20 *Razm*, Baroda). The long flowing costumes with heavy folds, the posture of their hands (sometimes holding books), the hair-styles, the deep shaded lines, the roundness and depth in the objects are all borrowed elements, assimilated into the Mughal *qalam*, tending towards a new trend in the history of Indian art.

The rhythm of an action taking place in a scene is sought to be depicted through a partial participation of figures in it. A gesture of the hand, the positioning of a leg or some ruffles in the costumes and such other exterior motions are utilized to produce the responses. The face, the eyes and the lips remain absolutely indifferent; even the attitude of the body is not wholly adjusted.

The hands, unless they are involved in a specific action, are shown in a few standard attitudes—folded on the chest, languidly hanging or gripped in front, palms closed or opened with one or two upraised fingers or even raised flatly with the fingers and thumb pointing upwards, in the typically Indian fashion (Pl. XXVI).[34] These postures seem to be introduced in order to emphasize the nature of action taking place in the scene.

The ornamentation of the human figures is done by decorating their costumes, arms, armour, etc. Care is taken to differentiate among the designs and motifs given to the figures appearing in a single scene. Sometimes, these patterns are so prominent as to distract the eye from the face.

[33]Motichandra, *op. cit.*, p. 92.

[34]"An important contribution of indigenous Indian art to the Mughal school of painting are *mudrās* or graceful hand poses." *Ibid.*, p. 64.

ANIMALS

Animal study is a significant aspect of Mughal painting. A good many representations of animals and birds, painted separately or together with others in action, as in the scenes of hunting, bird-trapping, animal fights, etc., are examples of vivid, minutely detailed realistic art. Most artists were skilled in the portrayal of the animals; a few of them specialized and produced masterpieces. They excel in capturing the likeness of the animals in all sorts of natural postures, bringing out the muscles and parts of the body with almost graphic perfection. They can give the expression of ferocity or compassion or fear or bodily tensions with a virtuosity that comes only through the coordination of a high degree of skill and uncanny powers of observation.

In the *Anwār* (Varanasi), animals are the subject of some tales and fables.[35] Various copies of the *Bāb* contain a series of illustrations displaying flora and fauna.[36] Sometimes the animals are in large groups, sometimes in pairs or just single. The Akbari painters have equally favoured quadrupeds, birds and aquatic animals. The *Akb* is rich in portraits of animal life in hunting and expedition scenes.[37] The animals are drawn in pairs or groups—often the various species of birds and animals within one compositional group. The last is true of hunting and bird-trapping scenes.

Animal portraits are blended harmoniously in soft tones and thin colour washes of light tints. This soft colour scheme, subdued in tone and typical of Mughal miniatures has enhanced the soothing effect in the landscape, in which mostly the green and blue pigments dominate. Accuracy of form, achieved by well-defined outlines, and maximum visuality are the chief characteristics. The animals are invariably drawn in profile; although figures of individual animals at rest are also drawn, it is violent action which has fascinated the artists most. The style of the Mughal painters differs from the Persian where animals are seldom shown in a state of action.[38] The Mughal artist not only displays a great variety of postures but goes further to make the representation more sensitive. Animal and bird figures are drawn in their natural surroundings.

Attention is also paid to the use of such pigments as reflect the actual colour of their skin, fur, etc. One cannot fail to admire the minute observation of the artists in which the characteristic features of the various animals, e g., hair, horns, fur, ears, tails, etc., are so realistically depicted as to enable one to distinguish their species at the first glance. Even with

[35]*Anwār*, ff. 17, 25, 30, 48, 55, 71, 80, 114, 160 (Varanasi).

[36]*Bāb*, pls. 25, 42, 43, 47, 53, 86, 113 (BM), pls. 44, 63, 64, 74, 80, 81, 88-113, 139 (Delhi), pls, 22, 25, 26, 36-47 (Moscow).

[37]*Akb*, pls. 17, 18, 22, 24, 40, 44, 81, 84, 90, 92, 93 (VA), f. 155 (CB).

[38]Barrett and Gray, *op. cit.*, p. 81.

a rudimentary knowledge of their species, one can distinguish them.[39] The artist had painted them after a careful observation. For this purpose, he would have seen the object closely and many times, as his creations are not merely the copy of the external appearance of the animals but the truthful illustration of their mood, nature and emotions. For the purpose, besides the accuracy in line and form and actual representation of colour, the artist depends on nature. Every figure is drawn in its natural surrounding. There is no doubt of the perfection of the work of Mughal artists in the portrayal of animals.

Birds are often used as decorative objects on a page of exquisite calligraphy.[40] Figures were drawn in narrow stripes in pairs or groups on the top margin or in the centre of the page.

No less than forty names[41] of artists appear on the miniatures depicting animal life. A greater number of these illustrations have been attributed to Manṣūr, Shankar Gujarātī, Basāwan, Sarvan, Lāl, Dhannū Miskīn, Mahesh, Sūryā Gujarātī, Bhawāni, Ḥusain *Naqqāsh* and Tārā. Manohar, Dhanrāj, Farrukh *chela*, Shivdās, Pāras, 'Abdullāh, Fattū, Anant, Lumānkā, Lachhman, Jagannāth, Payāg, Rāmdās, Āsī, Bānde, etc., have contributed single pieces of their art.[42]

[39]*Bāb* pl. 7 (Moscow) depicts three dogs: a Himālayan short-haired greyhound and a pair of adiag dogs; in pl. 22 of the same manuscript, the adiag dog also can be seen; this folio also has a *neelgāi* (antelope) lying in a catch of hunted animals. The one with a black mane and a larger tail is the onager. *Bāb*, f. 378 (BM), shows an elephant bearing spots on the ear, trunk and belly—a species then commonly found in the region of Kalpi. A scene showing the catching of birds, *Bāb*, f. 190 (BM), pl. 21 (Moscow), Bird trappers (Fogg) f. 45 (Delhi) show various kinds of birds such as hoopoes, parrots, ravens, quails, sparrows, wild doves, cranes, flamingos, etc. The scenes depicting huntings, animal fights, and the portraits of animals exhibit different species of lions, tigers as in the *Anwār*, ff. 30, 48, 80 (Varanasi); *Akb*, pls. 15, 17, 18, 23, 24, 92 (VA), ff. 148, 155 (CB); antelopes, stags, black buck, *chītal,neelgāi* and other species are seen in the *Akb*, pls. 27, 77, 92, 93 (VA); *Bāb*, pls. 63, 64, 80, 90, 91, 139 (Delhi), pls. 42, 43, 53, 61-63, 113 (BM), pls. 25, 26, 37, 38 (Moscow); birds—peacocks, Indian parrots, shorak, *pindāvālī* (a kind of shorak), *kanjal*, *pulpaiker*, *khārchal*, *charz*, *sāras*, *mānika*, storks, white buzak, ducks, magpies, wagtails, swallows, *kuil*, woodpeckers, partridges, cock, flamingos etc. in the *Bāb*, pls. 44-94, 109 (Delhi), pls. 25, 65-92 (BM), pls. 39-44 (Moscow); and water-animals—water-lion, *siysar*, sea-pig, *ghariāl*, fish (*kakkā*) and Indian frogs etc. in *Bāb*, pls. 112, 113 (Delhi), pls. 83-86 (BM), pls. 45-47 (Moscow).

[40]*Dīwān* (CB).

[41]'Abdullāh, Annant, Āsī *Kahār*, Banwārī *Kalān*, Banwārī *Khward*, Bānde, Basāwan, Bhawāni, Chatar, Dhannū, Dharmdās, Farrukh *Chela*, Fattū, Ḥusain *Naqqāsh*, Ibrāhīm *Kahār*, Jagannāth, Keshav *Kahār*, Keshav Gujarātī, Kesū *Khward*, Khem, Lachhman, Lāl, Laungā, Lumānkā, Mahesh, Manṣūr, Makrā, Miskīn, Mukund, Nand Gawalyārī, Narāin, Payāg, Pidārath, Rāmdās, Sarwan, Shankar or Shankar Gujarātī, Shiyām, Surjan, Sūryā Gujarātī and Tārā.

[42]Manohar: *Bāb*, f. 283 (BM); Dhanrāj: *Bāb*, f. 305 (BM); Farrukh *Chela*: *Anwār*, f. 30 (Varanasi); Shivdās: *Bāb*, f. 351 (BM); Pāras: *Bāb*, f. 347 (BM); 'Abduallāh: *Bāb*, f. 284 (BM); Fattū: *Bāb*, pl. 109 (Delhi); Anant: *Bāb*, pl. 108 (Delhi); Lachhman: *Anwār*, f. 160 (Varanasi); Jagannāth: *Bāb*, f. 352 (BM); Payāg: *Bāb*, pl. 97 (Delhi); Rāmdās: *Bāb* pl. 62 (BM); Āsī *Kahār*: *Bāb*, pl. 101 (Delhi); Bānde: *Bāb*, pl. 103 (Delhi); Lumānkā: *Tā'rīkh* f. 331 (Patna).

Miniatures done by Manṣūr are superb creations and have surpassed other artists in the skill of draftmanship, in the accuracy of form and in the line work. Although Manṣūr has not been mentioned by Abu'l Fazl, he began his career in Akbar's reign and painted many pictures of animal life. The series of five miniatures painted by Manṣūr is presented in the *Bāb* (BM).[43] A hunting scene in the *Akb* (VA) is his work.[44] Here he has worked as a side artist with Miskīn. In other instances also on the folios of *Bāb* (Washington) and *Jāmi 'ut Tawārīkh* (Teheran) (hereafter *Jāmi*) he appears as a side artist. Manṣūr was probably in the "budding stage" of his talent during Akbar's reign. Even then, the animal studies done by him are excellent examples of minute scientific observations. The details are correctly rendered in them and the colours are vivid and brilliant.

Basāwan, a most talented painter of the sixteenth century, is known for the illustration of numerous manuscripts. Various themes could be executed by him with equal facility. His name appears on more than 100 illuminated folios.[45] The most exciting scene, depicting Emperor Akbar hunting near Gawalyiar in 1561, attributed to Basāwan and Tārā *kalān*, is a masterpiece from the *Akb* (VA).[46] It is an example of joint work : sketching (*ṭarḥ*) by Basāwan and colouring (*'amal*) by Tārā *kalān*. However, Welch is of the opinion that the tiger shown beneath Akbar's sword is perhaps solely painted by Basāwan (pl. X).[47] In most of his works, Basāwan was assisted by other painters,[48] like Tārā, Sarwan, Chatar and Dharmdās. In the other example,[49] two trumpeting elephants crossing a bridge, Basāwan has preferred diagonal composition. Abū'l Fazl mentions him immediately after Daswant. He states that Basāwān was excellent in painting backgrounds and portraits and in distributing colours; he had most of the skills required by artists.[50] Animal drawings sketched by Basāwan vividly depict action. Mostly, he composed the animals in pairs or groups. He is famous for his drawings of animals. Lāl seems to prefer the portrayal of the deer. Accuracy in their form and their changing moods and postures are remarkable. Like Basāwan, he is also assisted by other painters.[51] Kesū *khwurd*, Khem, etc., worked with him. The drawings composed by Miskīn are distinguished for their rhythmic, forceful lines. The elephants he drew on pl. 90 *Akb* (VA), in a diagonal composition

[43] *Bāb*, ff. 387-89 (BM).

[44] *Akb*, pl. 56 (VA), where he has done the work of colouring only.

[45] *Encyclopaedia of World Art*, II, pp. 384-87.

[46] *Akb*, pl. 17 (VA): *ṭarḥ* Basāwan and 'amal Tārā *Kalān*.

[47] Welch, *The Art of Mughal India*, p. 28.

[48] *Akb*, pl. 17 (*ṭarḥ* Basāwan, 'amal Tārā *Kalān*), pl. 18 (*ṭarḥ* Basāwan, *'amal* Sarwan), pl. 22 (*ṭarḥ* Basāwan, *'amal* Chatar), pl. 24 (*ṭarḥ* Basāwan, *'amal* Dharmdās (VA).

[49] *Ibid.*, pl. 22.

[50] *Ā'in-i Akbarī*, tr. Blochmann, I, p. 114.

[51] *Akb*, pls. 44, 92 and 93 (VA).

depicting violent force can be compared with the work of Basāwan executed on pl. 22 in the same manuscript. In the present example Banwārī *kalān* joined him in the work. His independent work lies in the *Anwār* (Varanasi).[52] He balances the composition by introducing anima figures and prefers a harmonious colour-blending. Objects are filled with thin colour. Shankar Gujarātī[53] and Bhawāni[54] can well be trusted for fineness and accuracy in lines. To express the mood of tension and ferocity in the combat of animals is the skill of the latter. The former shows his excellence in the vivid portrayal of the animals. Landscape blended in a thin wash of colour and harmonious colour scheme, simplicity in form and rhythmic lines characterize his work.

Sarwan prefers to build up the whole picture mainly in blue and green colours, occasionally mixed with a tinge of yellow.[55] In a few of his works, the background has subdued the main objects. The representation of a wild Indian buffalo in the *Bāb* (BM) may be taken as his best work.[56] The strongly built body of the animal, drawn in a few lines with a suggestion of the curvatures of the body, stands out against the light background of yellow and blue. He seems to prefer drawing a single figure in the whole composition. Sūryā Gujarātī[57] renders details in bold lines and prefers to draw birds always in pairs. Dhannū[58] and Ḥuṣain *naqqāsh*[59] similarly portrayed birds and paints them in a wash of thin colours. The former laid much emphasis on the landscape. Mahesh[60] is known for his illustrations in the *Akb* (VA), *Bāb* (Delhi) and *Anwār* (Varanasi). The painting depicting "the capture of a wild elephant" seems to be the best of his works.[61] The diagonal composition has produced rhythm in the picture. In the present example, Kesū *khwurd* assisted him.

Hunting scenes show the artists' vivid observation. Various species of animals are crammed into one scene. Yet each figure has been treated individually and finished on separate planes. Basāwan, Dhanrāj, Jagannāth, Lāl, Manohar and Pāras have surpassed others in the composition and balance of landscape.[62] Farrukh *Chela* may be noted to be a talented artist for the illustrations of animals in the themes taken from tales and fables (Pl. VIII).[63]

[52]*Anwār*, ff. 48, 71 (Varanasi).
[53]*Bāb*, pls. 78-80, 85 (BM); *Anwār*, f. 144 (Varanasi).
[54]*Bāb*, pls. 94, 107 (Delhi), pl. 113 (BM).
[55]*Bāb*, pls. 59, 83, 84 (BM); *Akb*, pl. 18 (VA).
[56]*Ibid.*, pl. 59.
[57]*Ibid.*, pls. 76, 77.
[58]*Ibid.*, pls. 68, 75, 82.
[59]*Ibid.*, pl. 69.
[60]*Akb*, pl. 40 (VA); *Bāb*, pl. 91 (Delhi); *Anwār*, f. 55 (Varanasi).
[61]*Akb*, pl. 40 (VA).
[62]Basāwan: *Akb*, pls. 17, 18, 24 (VA); Dhanrāj: *Bāb*, f. 305 (BM); Jagannāth: *Bāb*, f. 352 (BM); Manohar: *Bāb*, f. 283 (BM); *Pāras*: *Bāb*, f. 347 (BM); Lāl: *Akb*, pls. 92, 93 (VA).
[63]*Anwār*, f. 30 (Varanasi).

Although Manohar has not been included in the list of court-painters furnished by Abu'l Fazl, he attained fame for his studies on animals.[64] His paintings are a treasure of varying modes of expression. In all of them, every possible detail is precisely rendered; the quality of draftsmanship is exceptional and the colours are vivid and brilliant. However, we come across only two illustrations[65]—a hunting scene and a princess on her death-bed—attributed to him.

One encounters various trends in the representation of animal figures. The elephants are drawn in the pre-Mughal Indian style, with the trunk always curled, and the whole drawing imbued with a solid three-dimensional effect. The treatment of the horse, the camel, the deer and the dog is nearer the Persian style. These animals have been rarely depicted in pre-Mughal Indian painting, with the exception of the deer, which too has become stylized. In the Persian and Mughal styles, the deer does in no instance lose realistic form. The treatment of the horse reflects the Persian concept of the ideal qualities of the animal—small face, fleshy, heavy body, thin, strong forelegs and a long tail. The representation of this animal appears to be similar in all the miniatures.

Fish are shown either straight or half-curled, and more often than not, half-submerged in water. This treatment has its origin in pre-Mughal Indian art.

Traces of Chinese art are also visible in animal paintings. Interestingly, the Chinese dragon has found its way in the form of the crocodile which is provided with all the attributes and features of its imaginary counterpart, namely ears, gigantic claws, flame-like lines originating below the lower jaw and running along the neck down to the chest.

The paintings of animals acquired a special significance in Akbari art. The portraiture of animals is a fascinating subject for the study of influences. The Iranian, Chinese and Indian influences can be categorically marked both in style and form. However, the Mughal painters were not mere imitators or adopters of existing ideas. On the contrary, their treatment of animals showed a great improvement. They replaced stylization by realism, and idealism by accuracy. To connect this development to the western or Chinese traditions would be stretching the argument a bit too far. None of these show so complete a mastery as do the Mughal painters. The Chinese were adept at the representation of birds; western artists achieved a singular success in the depiction of domestic animals. For the Mughal painter, the difference did not exist, for he could capture both forms with equal perfection. In their representation, the accuracy in form, a sensitivity in portraying moods and emotions, maximum detail, the use of natural colours, balanced landscape and a delicate colour scheme show not only the mastery of style and technique but also appreciation of animal life.

[64] *Encyclopaedia of World Art*, IX, p. 499.
[65] *Bāb*, f. 283 (BM); *Anwār*, f. 100 (Varanasi).

DECORATIVE MOTIFS

Decoration is an inseparable part of pictorial art and has fascinated the imagination of all artists who have used it as a complementary medium. The Mughal artists achieved a remarkable degree of expertise in the utilization of design. A glance through even a few miniatures affords an endless variety of designs and patterns used on costumes, ornaments, jewellery, utensils, furniture and buildings.

In the illustrations, the designs (Pl. XXVII) appear in different settings and forms, e.g., the geometrical and ornamental patterns and the stylized version of natural objects—a legacy of the Persian *qalam*. The motifs, five-petalled flowers with two stems on each end a lotus with elongated petals, interlaced with curvilinear leaves in onion-shaped units are quite common. Geometrical designing is based on the repetition of such units as a triangle, a square, a rectangle, lines and semi-circles. The hexagon, however, is the most commonly used. These designs decorate the borders of *shāmyānas*, *chārdīwārīs* of camps, floors and walls.

Costume designs display a considerable variety. All the three kinds of design, viz. the all-over design, the spot-design and the border-design are used. The *paṭkā*, the *doshāla* the carpet, etc., usually provide the ground for border designs. The most significant borders are those painted on the *ḥāshiyas* of *taswīrs*. These borders are mostly decorated with designs in ornamented and conventional curves and lines. All-over and spot-designs are found on carpets, garments, *shāmyānas*, floors, utensils, arms, armours, etc. Traces of the conventional Persian form are evident in such designs as oval and onion-shaped units, whereas the designs composed of vertical and horizontal lines are of typically pre-Mughal Indian character. A wider range of units is displayed in decorative motifs which include representations of a variety of flowers, leaves and buds. Motifs of birds and animals, utensils, etc., are rarely depicted. The animal figures—a tiger, an elephant, a deer and birds, find their way in the decoration of a *shāmyāna*, saddle-cloth and dome respectively.

Walls are frequently decorated, especially at the base, leaving about two-thirds of the upper part blank. An interesting feature is the use of the utensil forms for wall decoration. These are an indication of the affiliation of the art of Akbar's court to the Central Asian tradition.

The decorative art of the illustrations presents a cross-section of different traditions. The affinities are sometimes clear as in the use of the figures of elephants as units of linear or spot-decoration or of the realistic shape of the lotus flower, both of which are reminiscent of pre-Mughal Indian proclivities. In other instances, the adoptions are fused with alien elements as in the stylization of the lotus. The motifs of a dragon's head, and of birds with elongated beaks and furious expressions in the decoration of *'alams*, *aurangs* and boats are close to the Chinese tradition.

In decorative art and fertility of imagination, *Bāb* (BM), *Razm* (Jaipur) and

Tā'rīkh (Patna) are certainly the richest. The profusion of design appearing on all kinds of articles—costumes, *chhatras*, *sāyabāns*, *aurangs*, floors, walls, columns, utensils, even the nooks and corners having seemingly no significant place in the overall view of painting—is a treat to the eye. The *Anwār* (Varanasi), *Dīwān* (Rampur) and *Bāb* (Delhi), though not so heavily decorated, are, nevertheless, rich. The *Razm* (Baroda) and *Bāb* (Moscow) are comparatively austere. Evidently, the latter originates in a different technique. These are conspicuous for the tonality of their wet surface and for the economy of lines. The concept of detailing minute patterns, and careful shading by measured lines is characteristic of Mughal art and it is replaced here by a bold treatment of colours and lines, a technique which is less amenable to profuse and detailed design.

Carpets

In the paintings, the main characters sit on carpets. The king's throne was always set on a carpet. In fact every place where the king may be expected to sit, e.g., pavillions, decks of boats, rafts, dining halls, diwāns etc., were covered with costly carpets. The carpets display a beautiful variety of decorative designs. These are usually all-over floral and geometrical motifs. Sometimes they are spaced out regularly. Animal and bird forms are not used. The stylized form of the lotus and the onion-shaped curves are quite common and seem to be close to the Persian *qalam*. Horizontal and vertical stripes rarely occur. Plain carpets are very rare. With slight variations, floral designs are more or less similar in pattern and drawing. The basic design repeatedly used is of a blue carpet with a yellow border. The palmettes and interlacing scroll work form the basic patterns of the ground. This is true about the miniatures within one manuscript; the designs found in other manuscripts are not substantially different. Instances of spot decoration are rare.

The border is mostly composed of a continuous running pattern of a flower—four or five-petalled, with two stems on either sides. For border decoration, floral designs seem to find more favour with the artists than geometrical patterns. The latter comprise simpler forms, such as triangles squares, half-circles and lines. A distinction between the patterns in the centre and the margins is made by means of variations both in motifs and colours. Persian blue is predominant.

Some of the Akbari carpets[66] preserved in the museums display a

[66]Fragment of an animal carpet, 1.0065 by 1.29 m. of the third quarter of the sixteenth century (The Textile Museum, Washington, D.C.); A landscape carpet, 2.227 by 1.750 m., late sixteenth century (Museum of Fine Arts, Boston). The patterns and basic concept of design are Persian. The space is filled with beasts mythical objects, buildings, trees and floral devices. In the latter example, the composite animal shown in the lower margin of the carpet is unique. The figure is a combination of various animals i.e. a horse, an elephant, a lion and a bird. This fabulous animal is shown fighting seven elephants and a huge bird. Very similar composite animals are used as motifs in the decoration of the Delhi Gate of the Agra Fort. See Nath, "Depiction of Fabulous Animals (*Gaj Vyālā*) at the Delhi Gate of Agra Fort" *Medieval India—A Miscellany*, II, pp. 45-52.

remarkable degree of originality. Figures of animals, geometrical patterns, utensil motifs, architectural designs, animal fights, hunting scenes, the Chinese dragon, mythical objects and a variety of floral running designs are all made use of in amazing combinations and colours (Pl. XXXIII). This contrast is intriguing. For unlike the originals, the carpets painted in the miniatures are extremely repetitive, and indicate a singular lack of imagination. It is worth noting that with Akbaris fondness of ingenuity, the royal *kārkhānas* produced such fine varieties that the carpets of "Iran and Turan were no more thought of."

Shāmyānas and Tents

Shāmyānas may be decorated with floral or geometrical designs or may be left plain, though this is rare. No particular care is taken to be distinctive. Like the latter, the former may be done in overall or spot patterns and in similar colour schmes and units. At least in two instances, bird and animal motifs[67] are employed for decoration. Here, apart from the treatment of animal figures—a tiger drawn in the centre and birds on both sides—the rest of the composition remains Persian in style. The former proclaims the Mughal painters' originality and character. In another instance, the unit displays birds perched on the branches of trees. Their naturalistic representation associate the art with the Mughal *qalam*. In the border of the *shāmyāna*, however, geometrical designs are given preference to floral patterns. The borders being narrower are treated differently. The borders of the *shāmyāna* are bolder than those of the carpets. The dominant colour in them is also Persian blue. A few are painted in crimson red. An original expansion in decoration may be seen on pl. 86 *Razm* (Jaipur).[68] A miniature composed of human figures in the foreground and a landscape in the background is employed to decorate the space. The miniature is enclosed in several bands of lines surrounded with a broad floral border. This miniature may itself be taken as a painting. The use of a painting for spot-decoration seems to be the innovation of the artist. We have not come across such an example elsewhere.

The tents generally go with the *shāmyānas*. These may be plain or decorated on the outside or both inside and outside. Generally, the tents were decorated with running patterns. Spot-designs are rare. In spot decoration—flowerpots full with bunches of flowers and leaves or a cypress-tree embraced by another tree with five-petalled flowers—could be drawn as units and repeated alternatively. The *qanāts* (curtain used as a wall along with the tents and *shāmyānas*) are also decorated with similar patterns.

[67]*Akb*, f. 1 (CB); *Tā'rīkh*, f. 89 (Patna).

[68]This illustration is attributed to the artists, Tārā (*tarh*) and Rāmdās (*'amal*). In the other works of these artists in this manuscript or elsewhere, such unique adjustment of a miniature in decoration is not to be seen. In the present example, it may be taken as accidental.

Insignia, Arms and Armour

Arms, armour and insignias are generally decorated. Among the insignias, the *sāyabān*, the royal umbrella and the thrones were embellished with floral designs of the type observed in the carpets. One comes across varying forms of *'alam* heads, in which motifs of utensils, animal heads, dragons and human faces are seen. Spot decoration occurs very rarely. The *'alams* are wrapped in fine linen, with prints resembling those of costumes.

The arms—sheaths, bow-cases, quivers, shields—have designs similar the costumes. Freehand work is seldom seen on the shields but commonly on armour. The designs are bolder, drawn in horizontal or vertical stripes, checked patterns with nail-head spots, crosses, and small circles or flowers on the points of intersection or within squares.

Floors and Walls

Decorative designs on floors, walls, spandrels and pillars form a type which is quite distinct. A common motif is a hexagon repeated alternately with a star. It may be replaced by a pentagon or by an equilateral triangle, or sometimes by a square in a variety of settings, breaking the monotony. Sometimes, the star is replaced by a flower—of course, in a stylized form. As a matter of rule, freehand drawings are not favoured for floor decoration and accuracy in repetitive patterns is considered necessary. Among the different combinations, composite units of a hexagon and a six-petalled flower drawn in a geometrical form, a star and a triangle, and a hexagon and a star are greatly favoured.

Wall decoration is very similar to that of the floors. Pillars, domes and walls were decorated with simpler geometrical units, such as circles, hexagons and triangles. Circles are usually divided into three equal parts or sectors with straight lines.

For the decoration of domes, both geometrical or floral patterns were employed in overall settings. The former is mostly preferred. There is at least one instance in which a running deer, drawn in a three-dimensional form is adopted as the main motif.[69] It has been set inside a floral design and repeated in a circular sequence about the base of the dome. The floral decoration of the dome is reminiscent of the Persian *qalam*. But the presence of the animal form is undoubtedly an original expansion which is not met with anywhere else. The spandrels provide another ground for floral and geometrical patterns which are so conceived as to match the designs given on the walls.

Costumes

The richest variety of designs is found on the costumes, especially the *jāma*, *farjī*, *paṭkā*, *doshāla* and the turban. These are done entirely in free hand and bear both the spot-design and all-over pattern. Floral designs

[69] *Bāb*, f. 520 (BM).

are, however, commoner than others, though the finest of them appear on the *jāmas*. The *paṭkās* are decorated on both ends. Generally a band is given on the lower edge and it is repeated above to make a kind of border at both ends. In between these spaces, there are small spot or all over designs. Occasionally, the *paṭkās* are found decorated with chains of triangles. Turbans are generally depicted plain, and sometimes decorated with parallel and cross stripes of lines or small motifs of flowers or dots in spot and running settings. But it is in the case of shawls that the artists show an imaginative use of the spot patterns.

The saddle-cloth is a miniature carpet, so to say, and is embellished with similar patterns in a much diminished size. Variety however, is lacking here. The motifs used in one painting may be found repeated in several others. In one instance,[70] the lower part of the saddle-cloth has the figure of an elephant and a lotus. As a matter of rule, geometrical designs were not favoured, though a few saddle-cloths were left plain.

Utensils

The decoration of the utensils shown in the paintings do not present as significant a case for our study as the items which have been dealt with above. The forms of utensils are less numerous and bear the conventional designs that we can still see today on earthenware, e.g., pitchers. The usual style is of horizontal bands or vertical lines starting right below the neck and curving downwards, corresponding to the form of the utensil. The former are special to lids, bowls, dishes and serving-pots. In between the horizontal bands, often drawn in pairs, the spaces are filled with zigzag lines, as though in symbolic expression of water.

Border Designs

The border (*ḥāshiya*), is a secondary part of the *taswīr*. Nevertheless, the Mughal artists regarded it as a necessary element. The reasons may well be understood. Its primary function was to regularize the outlines or margins of the painting, or to give it an artistic finish. Here, the artist enjoyed considerable liberty and within the narrow stripes of the *ḥāshiya*, he tried to display all that he could in order to provide the painting with additional decor. He could choose contrasting motifs or colours to emphasize the main theme or to enhance its aesthetic appeal by rendering it in matching colours and objects, such as creepers, leaves, flowers, and design of various types. The practice reflects the fondness of the painter and his patron for ornamentation.

The *ḥāshiya* decoration was entirely the work of different painters who specialized in design. When the *taswīr* was finished, it was given to the *waṣlīgar* who mounted it and then passed it on to the *jadval ārayān* (line-drawer). Several line-drawers were employed in the Mughal atelier of

[70] *Ibid.*, f. 305.

paintings.[71]

Borders are simple. The illustrations are enclosed by additional narrow bands mainly in black, deep-green, blue, white and gold pigments. These may be four to eight or even more, running parallel to the corresponding *ḥāshiya*. Lines are drawn with accurate measurement of length and breadth. A very narrow space is left between two lines. It is sometimes painted with gold pigment. In other cases when the space is broader, it is decorated with floral designs.[72] Deep and contrasting pigments are preferred.

Border decoration in the illustrations of the *Dīwān* (Rampur)and *Bāb* (BM) manuscripts, is a class by itself. It displays flowers, buds and leaves in all-over settings. In most cases, three- or four-petalled flowers are drawn at a measured distance. These are linked to one another with stems and leaves. Both stylized and natural forms of flowers, buds and leaves are equally favoured by the painters. Sometimes these motifs are spot-set. In the latter manuscript, the borders facing the binding are sometimes wider than the other sides, which in themselves are of unequal width. It is difficult to understand the reason for this. Brown thinks that this system has been derived from Persian book-illustration.[73] Certainly, however, it relieves the monotony which would be created by a uniform border-line. The unequal proportions of designs appearing on different sides, and likewise, the variations found in the motifs themselves seem to be conditioned by the uneven width of the borders. The most illustrious borders are of the *K͟hamsa* (BM). Under Akbar border painting was limited to the representation of wild life and landscape comprising hillocks, streams, trees and plants etc. It further developed under Jahāngīr, to include genre scenes as well as single figures in cartouches.

Besides the border, the margins of illustrations in the *Dīwān* (Rampur and CB) are decorated in a variety of conventional, floral designs, stencilled in gold (Pl. XXVIII). Floral motifs are drawn directly from nature with inner details in line drawing. The stylized form of a lotus with elongated petals, a flower with five or seven petals and curvilinear leaves and stems are very common.[74] Occasionally, the figure of an elephant, or a tiger or a fox, or of a tiger with the characteristics of a Chinese dragon with flame-like lines emanating from the body are seen. Such decorated margins are sparingly used in the manuscript to embellish the folios of the text. Similarly, in the other copy of the *Dīwān* ff. 1-2 display stencilled floral designs depicting a human head emerging from blue petals and enclosed in a circular golden sun with undulating rays. These are the earliest examples of margin painting employed to decorate the illustrated manuscripts in Akbar's time.

[71]*Ā'in*, *op. cit.*, p. 115.
[72]*Dīwān*, ff. 19, 20, 30, 74, 116, 147, 177, 211, 247, 284, 314, 355 (Rampur).
[73]Brown, *Indian Painting Under the Mughals*, p. 190.
[74]*Dīwān*, ff. 19, 30, 74, 116, 147, 211, 284, 355 (Rampur).

In the illustrations belonging to the *Akb* (VA,CB), *Razm* (Jaipur, Baroda), *Tā'rīkh*(Patna)and *Anwār*(Varanasi). decorative *ḥāshiyas* with motifs of natural objects totally disappear and only the border lines remain. The illustrations of the *Bāb* (Moscow) are all made in flush-cut. These have neither the *ḥāshiya* nor the *khaṭ* or the bands of lines.[75] This is rather interesting, though its significance is difficult to ascertain.

[75]*Khaṭ:* For decorative purposes straight lines in various colours in harmony or contrast with the colour scheme of the painting were drawn on the border. See Motichandra, *op. cit.*, p. 66, n. 15; Brown, *op. cit.*, pp. 190-91; and also his *Indian Painting*, p. 104.

4 clothes and draperies

We get a glimpse of Mughal fashions from the variety of dresses displayed in the paintings. Unfortunately, contemporary sources give inadequate description of the clothes making their identification difficult. The *Ā'in* gives a list of the articles of Akbar's wardrobe.[1] It seems that Akbar changed the names of a few dresses by drawing on Hindi usages, and also made some minor alterations in the forms.[2] Thus the word *jāma* was replaced by *sarbgātī; izār* (drawers) became *yārpīrāhan; nīmtana* was called *tanzeb*; *patgat* was adopted for *fauṭa*; *chitragupita* was preferred to *burqa'*, *kulāh* was given the name of *sīs sobhā*; *mūy-bāf* (hair-ribbon) was changed to *kesghan*; the loin-cloth was called *paṭkā* instead of *katzeb*; *shāl* was called *parmnarm*, and *pāy-afzār*, i.e. the shoe, acquired the descriptive name of *charndharn*. The Hindi equivalents help us to some extent in determining at least the uses of these clothes, the Persian names of which must have been traditionally in use. Abu'l Fazl has also given a descriptive list of some other clothes along with their Persian names.[3] However, the specifications given by him relate mainly to the nature of the material and the costs involved in their production rather than to their actual forms and uses. This has led to some confusion, as in the case of Blochmann.[4] For instance, there is no indication whatsoever of what Abūl Fazl has called the *dutāhī*, *shāhajīda* and *sūzanī* as being apparel. It seems rather that these were parts of the royal bedding or plain sheets.[5] These names have survived to this day without any change in their form and use.

Moreover, the *Ā'in* enumerates only a few of the clothes—the need for brevity being the author's excuse for the omission Any assessment such as this will, therefore, lack the basis of definitive means of identification. While using the *Ā'in* as the main source, we will also rely on current usages, dictionary definitions and last, but not least, commonsense.

[1] *Ā'in-i Akbarī*, tr. Blochmann, I, pp. 93-98.
[2] *Ibid.*, p. 96.
[3] *Ibid.*, pp. 94-96.
[4] *Dutāhī*—a coat of lining; *Shāh-ajīda*—the royal stich coat; (*ibid.*, p. 95).
[5] *Ā'in-ī Akbarī* (Sir Sayyid edition), p. 72.

CLOTHES

Of the four main outfits, the *jāma*—also called the *takauchiya*[6] or *sarbgātī*[7]—appears to be the commonest (Pl. XXIX). It was a coat and might have been worn over some sort of a shirt or half-shirt which, however, had no occasion to be depicted in the illustrations. It was generally loose-fitting and was long enough to cover the body up to a little above the ankles. The length of the *jāma* varied according to fashions. Collars were never worn high; instead, they were cut round at the back and the edges were sewed up and turned. The coat had full sleeves, gradually tapering towards the end and fitting the forearm. The front was double-breasted. The upper span crossed over the chest from left to right and was tied below the armpit with laces. It was made from seven yards and seven *girihs* of cloth.[8] It appears that special kinds of cloth were used for making a *jāma*. The rich people decorated it with embroidery and gold thread. The *katzeb*, a cloth belt, was tied around the waist with a fine knot—the ends hanging to some length in the front. According to Abu'l Faẓl, Akbar ordered the *takauchiya* to be tied to the left side instead of the right, and called it the *sarbgātī*.[9] In the illustrations, however, we come across both the kinds, irrespective of any distinction of status. The description of the *takauchiya* given by Abu'l Faẓl is the same as that of the *jāma* or *angarkhā*, i.e., protector of body, as it was known among the Hindūs.[10]

The *jāma* originally belonged to Central Asia and China[11] and was treated as an Indian garment in the sixteenth century.[12] It was in vogue among the Rājpūts before the advent of the Mughals. It is evident from the account given by Abu'l Faẓl, when he says that "The *takauchiya* is a coat without lining, of the Indian form. Formerly, it had slits in the skirt, and was tied on the left side. His Majesty has ordered it to be made with a round skirt, and to be tied on the right side.[13] The Rājpūt *jāma* which had four pointed prolongations, two on each side in the hem of the skirt was modified by Akbar who had the hem made round (Pl. XXIX, Figs. 1-3). The former type remained in fashion at the Mughal court during the late sixteenth century and early seventeenth century, and may be observed in the illustrations of the *Hamzā*, *Bāb*, *Tā'rīkh*, *Akb* etc.

With very slight variations, the *jāma* continued to be the main outfit of gentlemen until very recent times. It is still worn by old-fashioned Brahmins, especially in the hills, folk-dancers and Hindū bridegrooms.

[6]Blochmann, *op. cit.*, p. 94.
[7]*Ibid.*, p. 96.
[8]*Ibid.*, p. 94.
[9]*Ibid.*
[10]Ghurye, *Indian Costumes*, p. 129.
[11]Coomaraswamy, *Catalogue of the Indian Collections in the Museum of Fine Arts, Boston (Part V), Rajput Painting, p. 27.*
[12]*Ibid.*, p. 26.
[13]Blochmann, *op. cit.*, p. 94.

The *jāma* of the commoners appears to be shorter—up to the knee or the middle of the thigh (Pl. XXIX, Figs. 4-5).

The attendant's tail-coat is a peculiar adaptation of the *jāma* (Pl. XXXI Fig. 3). The royal attendants (guards) of the Mughal court were expected to wear special uniforms. This included a tail-coat, short trousers, a turban or a cap and some cases, socks. The tail-coat is similar to the *jāma* of the commoners, but for the tails. The tail covered the hips, the rear part of the skirt, and was long enough, reaching a little below the calf muscles. The front hem of the skirt ended at the middle of the thighs.

The Farjī

The *farjī* may be called the winter equivalent of the *jāma* which it resembles, except that it opens in the front instead of the side. It is generally made with small turned collars. A full *farjī* was quilted with a seer (Akbari) of cotton and was tied at the waist with the *katzeb*.[14] It was a long coat, tight-fitting over the chest, and with a full skirt, opening up to the waist only and with buttons or several fastenings between the neck and the waist (Pl. XXX, Figs. 1-2).

The Gadar

The *gadar* (an overgarment) seems to be a costly winter garment. It has been called the Indian fur-coat by Blochmann.[15] It was longer than the *farjī* and had a border of fur running over the opening sides in the front. The *gadar* was made without collars with half or full sleeves and was quilted with two and a half seers of cotton (Pl. XXXI, Fig. 1).[16] The *chiltah* was another quilted royal coat.[17]

The Qabā, or Jāma-yi pumba-dār[18]

The *qabā* was also a quilted winter garment, generally worn over the main dress[19] and has been associated with priesthood. No wonder, it has been treated as a sign of dignity as well as of learning. It was either full- or half-sleeved. It was loose-fitting, full length and open in the front and had no buttons, but had a binding all along the front up to the waist (Pl. XXXI, Fig. 2). The *qabā* was usually made of costly cloth. It could be made with a folded collar (*bātū giribān*)[20] and embroidered[21] with gold thread. It was worn by ladies also.[22]

[14] "It is worn over the *jāma* (coat), and requires 5 *gaz* 12 *girih* stuff; 5 *gaz* 5 *girih* lining; 14 *girih* bordering; 1 s. cotton; 1 m. silk." *Ibid.*, p. 95.

[15] *Ibid.*

[16] *Ibid.*

[17] *Tūzuk-i Jahāngīrī*, tr. Rogers and Beveridge, I, p. 63.

[18] Blochmann, *op. cit.*, p. 95.

[19] *Ibid.*

[20] Rogers and Beveridge, *op. cit.*, p. 384.

[21] *Tabaqāt-i Akbarī*, tr. De, II, p. 480.

[22] *Bāb*, f. 13 (BM).

The Peshwāz

It was a long flowing robe for ladies (Pl. XXX, Fig. 3). The *peshwāz* combines the bodice and skirt. Abu'l Faẕl describes briefly as being like the *jāma*, but open in the front.[23] According to the *Farhang-i Anand Raj*, it was specially for women.[24] The miniatures show the royal ladies, female dancers etc., clad in the *peshwāz*. The *peshwāz* is still used as the main costume of the female dancers of the *kathak* style, though it is possible that it may since have undergone slight variations. It was tied somewhere on the middle of the chest rather loosely. At times, it could be made without fastenings. It had long, tight sleeves, crinkled above the wrist. We have no evidence of a *peshwāz* being quilted. On the other hand, it seems to have been a summer dress, made of thin cloth, probably muslin, or voil, or silk. During winter, ladies wore the *qabā* over it.

The Burqa', Naqāb,[25] or Chitragupita[26]

It was a veil for the Mughal ladies and consisted of a long skirt, closely pleated, covering the whole body with two small, round or square-cut eye-holes. The top of the skirt covering the head was ornamented and pleated. The more closely fitting modern veil has probably originated from the *burqa'*.

The Shalwār[27] or Izār (Drawers)

It is the prototype of the trousers of today, and is called a *churīdār*, but is basically different in cut as well as general appearance. It is commonly regarded as of Muslim origin.[28] The *shalwār* was loose fitting up to the knees and crinkled below them. It was fastened on the waist by a string (*izārband*) probably of knitted cotton or silk passed through the seam (*nefā*) of the trousers. Akbar called it the *yār-pīrāhan*.[29]

The trousers of the commoners are shorter. The drawers hardly reached a little below the knee, were loose at the top but fitted tightly at the end. The royal attendants (guards, cooks, etc.) are also shown in similar drawers worn below the *jāma* or tail-coat. The trousers of the ladies do not seem to be at all different from those of the gents.

The Dastār, or Chīra[30]

No single dress was perhaps worn in such a variety of fashions as the

[23]"The *peshwāz* (a coat open in front) is of the same form, but tied in front. It is sometimes made without strings." Blochmann, *op. cit.*, p. 94.

[24]*Farhang-i Anand Raj, s.v. peshwāz.*

[25]*Humāyūn-nāma*, tr. Beveridge, p. 127.

[26]Blochmann, *op. cit.*, 96.

[27]*Ibid.*

[28]"Some use of trousers in India may date from Kusana period, but in the Mughal—Rajput period and in modern usage they are commonly regarded as of Muhammadan origin." Coomaraswamy, *op. cit.*, p. 29.

[29]Blochmann, *op. cit.*, p. 96.

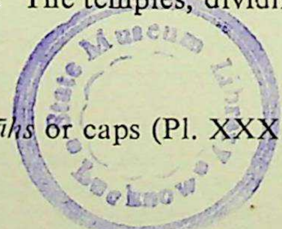
[30]*Ibid.*, Rogers and Beveridge, *op. cit.*, I, p. 290.

turban (Pl. XXXII). It was not only a headgear; it also signified dignity and respect. To go out bare-headed was considered disgraceful by the gentry. The cloth was specially woven with fine silk or cotton thread. It was folded lengthwise and twisted in the form of a thick rope and wrapped round a *kulāh* fitting the size of the head. The length of the turban varied a great deal. However, it was long enough to suffice two, three or more folds of several loops each. Jamila Brij Bhushan reckons a turban to be 12 to 18m. in length, and 24 to 30 cm. in breadth.[31] The loops were set closely—crosswise, circular or oblique.

The turban of the king was made up of cross-loops without any loose ends (Pl. XXXII, Figs. 1-8). It was bedecked with pearls in a crescent, in the front, to one side and often ornamented with jewelled or enamelled plumes or some beautiful motif. Jahāngīr mentions the *jīghā*—a turban ornament.[32] The *jīghā* was sometimes bejewelled.[33] This was the simplest of the king's turbans but was massive, beautiful and majestic in its very simplicity. Sometimes, it was embellished with intersecting bands or richly embroidered ribbons. In the later period, the royal *dastār* appears in nastā'līq style.

The *dastārs* of nobles were of different shapes and apparently not so plain (Pl. XXXII, Figs. 9-16). Often, they were tied so as to leave a triangular crest just above the crown, or in front or at the back. Bābur has mentioned three types of *dastārs*—apparently distinguished by the number of loops[34]—worn by the nobles. These are called the *sih pech*, *chār pech* and *dastār pech*. A *dastār* could contain up to nineteen loops. The Rājpūt *pagrī* seems to have been adopted at the Mughal court in the time of Akbar.[35] Its form is asymmetrical, sloping backwards and bound by a transverse band of different material.

A wider variety of turbans, used by the commoners, were plain and simple (Pl. XXXII, Figs. 17-32). The royal attendants had particular styles in accordance with their special functions. The royal pages moving in the vanguard of the king with a battle-axe, sported a long plume which resembled an ear of corn, and began from the back of the forehead. The turban had two strips, one almost flat covering the forehead up to the middle of the head and the other covering the back. The temples, dividing the two folds remained bare.



The Kulāh,[36] *or Sīs Sobhā*[37]

Besides the turban, the common people used *kulāhs* or caps (Pl. XXXII,

[31]Bhushan, *The Costumes and Textiles of India*, p. 40.

[32]Rogers and Beveridge, *op. cit.*, p. 248.

[33]*Ibid.*, p. 102.

[34]"He wound his turban in a fold (*dastār-pech*); all turbans were in four folds (*chār-pech*) in those days; people wore them without tuisting and let the ends hang down." *Bāburnāma*, tr. Beveridge, I, pp. 14-15; three-fold turban, *ibid.*, p. 258.

[35]Coomaraswamy, *op. cit.*, p. 25.

[36]Blochmann, *op. cit.*, p. 96.

[37]*Ibid.*

Figs. 33-36). These were beautifully fashioned and usually made of lamb-skin.[38] Sometimes a feather was used for ornamentation. The top was usually very high and curved elegantly to one side. The base was bordered with fur or felt.

The *dupaṭṭa*, probably a purely Indian dress, seems to have been adopted by the Mughal ladies. The fashion of wearing a *dupaṭṭa* or *orhnī* as a head-dress is evident from a few paintings.[39] *Shāls* or any other long sheet of cloth (*chādar*) could be thrown on the head and wrapped around the body, performing the same function as the *dupaṭṭa*. The fashionable head-dress of the ladies was a cap. It slanted upwards and backwards, following the line of the jaw; the end was not conical but curved, with a piece of fine silk sometimes attached to it. Often the silk extended into a flap below the base line of the cap so as to cover the nape of the neck. These caps were adorned with pearls and jewels in beautiful all-over patterns. Even the simpler kinds of caps were generally embroidered.

The Paṭkā,[40] or Katzeb[41]

The *katzeb* or the cloth belt tied around the waist over the *jāma* and *farjī* was both a necessity and a decoration. It was made of fine silk or cotton cloth. It was folded and was long enough to be knotted around the waist, with the ends hanging to the knee. The *katzeb* could be plain, laced, embroidered, brocaded or printed. Later, Golkunda[42] became a popular centre for manufacturing the *katzeb*.

The Shāl

The woollen or cotton sheet folded lengthwise, with or without a border, wrapped about the shoulders with one of its ends hanging from the lifted forearm is what goes by the name of a *shāl*. Usually, the sheet was made for the purpose, in special sizes. The width was just enough to cover four lengthwise folds. Later on, Akbar had ordered *shāls* to have only two folds instead of four which gave it the name of *dhoshāla*.[43] He also encouraged the *shāl* industry resulting in the growth of Kashmīr and Lāhore as important manufacturing centres.[44] A costly variety of the shawl

[38]Bābur mentions in his memoirs "black lamb skin cap (*Burk* or the *Qalpaq*)." Beveridge, *op. cit.*, p. 258.

[39]*Tā'rīkh*, ff. 7, 10, 40, 72, 193, 241, 284, (Patna); *Akb*, f. 25 (CB), pl. 3 (VA).

[40]Blochmann, *op. cit.*, p. 96.

[41]*Ibid.*

[42]Bhushan, *op. cit.*, p. 32.

[43]"People folded them up in four folds, and wore them for a very long time. Nowadays they are generally worn without folds, and merely thrown over the shoulder. His Majesty has commenced to wear them double, which looks very well." Blochmann *op. cit.*, p. 98.

[44]"His Majesty encourages, in every possible way, the manufacture of shawls in Kashmīr. In Lāhore also there are more than a thousand workshops. A kind of shawl, called *māyān*, is chiefly woven there; it consists of silk and wool mixed." *Ibid.*

was the *ṭūs shāl*.[45] This seems to be the same as, or the forerunner of, the *shāl ṭūs* now manufactured widely in Kashmir from the wool of camel and sheep foetuses. The *ṭūs* was very light, soft and extraordinarily warm. The natural colours of the wool from which it was manufactured were black, white or red. Generally, the people used it without changing its natural shade. Akbar ordered it to be dyed in various shades.[46]

Another variety of the shawl was the *safīd alcha*, also called *ṭarḥdār*.[47] Before the time of Akbar, it was of two or three colours: black, white or mixed. Akbar got it dyed in various shades.[48]

Bābur speaks of another variety called *qāb*.[49] It was a square sheet and was bestowed as a token of distinction by the king on the nobles. It is difficult, however, to distinguish it in the paintings. In the miniatures one generally comes across a very fine, transparent, soft sheet of cloth worn in a casual manner by the king.[50] On f. 163 *Bāb* (BM), Bābur has been depicted with a wrapper slipped over the back. It does not appear to be very long. The border is made of fur. This peculiar article does not seem to be indigenous and may have been either of wool or most probably of skin.

FOOTWEAR

Pāy-afzār[52]

A striking variety of footwear (Pl. XXXIV) is found in the illustrations, though this variety is confined to decoration rather than cut. There are at least seven types of footwear. These may be broadly classified as shoes and slippers. In the general form of the shoe the upper part is made of a single piece of leather. The back of the foot is supported by an elongated attachment; the flap is generally long enough to reach the calf muscles. This kind of shoe was worn by the common people and attendants. All these were

[45] *Ibid*, p. 97.

[46] *Ibid.*

[47] *Ibid.*

[48] "Secondly, in the *Safīd Alchas*, also called *Tarḥdārs*, in their natural colours. The wool is either white or black. These stuffs may be had in three colours, white, black, or mixed. The first or white kind was formerly dyed in three ways; his Majesty has given the order to dye it in various ways." *Ibid.*

[49] Beveridge, *op. cit.*, II, p. 527.

[50] *Bāb*, ff. 199, 305 (BM), pl. 8 (Moscow).

[51] "His Majesty has caused carpets to be made of wonderful varieties and charming textures; he has appointed experienced workmen, who have produced many masterpieces. The *glīms* of Īrān and Tūrān are no more thought of, although merchants still import acrpets from Goshkān, Khūzistān, Kirmān and Subzwār. All kinds of carpet weavers have settled here, and drive a flourishing trade." Blochmann *op. cit.*, p. 57. See also "Carpets" in chapter 3.

[52] *Ibid., op. cit.*, p. 96.

pointed and curved upwards, sometimes curling inwards. The shoes worn by the emperor while riding, bear an astonishing resemblance to modern riding boots, It is a one-piece shoe, pointed, high-heeled and fitting the whole foot around and below the ankle. A pointed *guragābi*-like shoe, with a heel and high back was worn by the nobles. This was also a one-piece shoe, though the designs varied.

The slippers were all boat-shaped, with a variety of embellishments and designs on the upper flap. Some had cross flaps or decorative buttons or even geometrical patterns. The point of the toe was sometimes bedecked with a fur pompom. A slipper with a pointed toe curved inwards, very similar to the slipper known as *salīmshāhī*, is sometimes seen in the paintings. Perhaps the *salīmshāhī* was an innovation of Prince Salīm.

The ladies are mostly shown barefoot, except in a few instances where royal ladies are shown riding, or on expeditions.[53] They wear a closed slipper of a simple kind, probably embroidered. The heel is bare.

From the *Ā'in*, we only know that the shoe called *pāy-afzār* was renamed by Akbar as *charndharn*.[54] That socks were not common and slippers greatly favoured, is evident from Bernier's account. He has mentioned that owing to the excessive heat in Hindustān, the people do not wear socks and the common cover for the foot is the slipper.[55]

[53]*Tā'rīkh*, ff. 8, 12, 40, 284, (Patna); *Akb*, f. 143 (CB), pl. 9 (VA).
[54]Blochmann, *op. cit.*, p. 96.
[55]*Travels in the Mogul Empire*, p. 240.

5 utensils

Utensils used in the Mughal Court must have been of a great variety, but the paintings depicting them being few, our knowledge of them cannot be more than sketchy. Utensils are mostly represented in the scenes of feasts and festivities and formal gatherings. Apart from domestic scenes, they sometimes appear in stylized and purely ornamental forms as emblems or symbols in the ensigns or royalty, viz. *'alams*.[1] The variety of utensils with their commemorative ornamentation impart valuable knowledge about the technology and uses of life of a given period. These utensils may be roughly divided into five groups: kitchen pots, serving-pots, wine-pots, cutlery and decorative utensils.

The kitchen pots are mostly inside, with narrow necks, round or spherical body and an oval or flat base. These are invariably large (as each item of the meal was cooked in quantity) and simple, decorated with geometrical patterns on the surface.

The serving-pots are of different types, their shapes varying according to their utility. A few are long and shallow (sometimes long and deep) dishes for containing fruit. There are bowls with or without lids, oval or semi-circular in shape, for holding liquids, platters for rice preparations, long serving dishes of the kind known as *qāb* for vegetable and meat preparations and trays for holding roasted birds or large pieces of meat. Others are wine-containers like the long narrow-necked flasks, reminiscent of the Persian *mīnā*, beautiful jars and drinking-bowls and cups—the familiar *piyālā* and *surāhī* of Persian poetry.

Big and small flower-pots, candle-sticks and the *zair-i itrdān*—a stand to hold the perfume-containers, were objects of purely decorative purposes.

The *deg*—a cooking-pot—is in fact a version of the modern *deg*. There are a few folios showing this utensil.[2] Generally, they were of the same shape, with minor changes in form. In f. 253 (*Bāb*, BM), the scene is set in a kind of serving-room where food is shown being transferred from the *degs* to the serving-dishes. They are mostly large; their form is either round, or oval or hemispherical with a flat or elliptical base (Pl. XXXV,

[1] *Akb*, f. 226 (CB), pl. 15 (VA); *Razm*, pl. 72 (Jaipur); *Tā'rīkh*, ff. 11, 14, 23, 24, 73, 202, 227, 238, 337 (Patna).

[2] *Akb*, pls. 28, 97 (VA); *Anwār*, f. 178 (Varanasi); *Tā'rīkh*, f. 118 (Patna); *Bāb*, ff. 253, 257 (BM), pl. 23 (Moscow).

Figs. 1-3). The *deg* seems to have been the main cooking-pot of the Mughal kitchen.

The *gharyā*—smaller than the *deg*—is another cooking-pot. It is made of clay, and has a wide mouth, small neck and elliptical body (pl. XXXV, Fig. 4). It resembles the *kalsiyā* of the modern time.

Jugs of different sizes were used as water containers. (Pl. XXXV, Figs. 5-12). They were usually of the same shape—a large body, round or oval, with a small neck and a funnel-shaped opening. The jugs were mostly rounded at the base, to which was sometimes attached a high, flat block. Handles were rarely connected with the body. They were curved like an ear and fixed on each side of the jug. The *Razm* represents the pitchers with two handles.[3] Scenes depicting the *Ashavameghayagya* show a variety of pitchers, known as *kalash*.

Small jugs, known as the *lotā* and used to carry and serve water, are painted in plentiful variety by Mughal painters (Pl. XXXVI, Figs. 4-6). The *lotā* resembles the pitchers except for a difference in size. These are made with or without a spout and a handle. Handles are attached to the body on one side, along the entire length of the pot or fixed on the top of the lid or a little below the neck. The *lotā* used by Hindū saints, known as *kamandal*, has the handle of the latter type. It has an oval body with a small base and narrow opening (Pl. XXXVI. Figs. 8-11). It could be with or without a spout. The *kamandal* was carried like a bucket. The *lotā* used by masons or labourers is rarely represented. Plate 86 *Akb* (VA), which represents the construction of the buildings of Faṭehpūr Sīkrī, shows one of the types. It is an earthen pot with a small body, flat bottom, small neck, opening out broadly like a funnel and a small spout for pouring the water (Pl. XXXVI, Fig. 7). This type of *lotā* is known nowadays as a *badhnā*.

DISHES

The dishes include *qābs*, platters, fruit-dishes and *surāhī*-containers.

The Qāb (Pl. XXXVII)

These are more or less of the same shape—oval, with a broad mouth and gradually narrowing towards the base. Some of them have a flat base. *Qābs* are of various sizes. The platters are invariably made large and flat based.

Fruit-dishes (Pl. XLVI, Figs. 1-11)

Fruit-dishes greatly resemble the *qābs* except that the base itself has height. These dishes are richly designed and frequently represented in the illustrations. A few fruit-dishes are set on conical stands. The depth of the

[3] *Razm*, pl. 14, 122 (Jaipur).

dishes vary. The *Razm*[4] displays a variety of deep fruit-dishes. Generally, they are shallow like a *qāb*. The dishes have no lids.

Surāhī-containers (Pl. XLIV, Figs. 26-28)

The *surāhī*, *piyālās*, etc., were themselves held within a large and deep dish. Their sides are convex, with the rims curving either outwards or inwards. Occasionally, the sides are upright. The base is always flat, to provide an even surface. Some have a platform and, in the case of a few others, small legs are fixed to the base as in pl. 94 *Akb* (VA).

LIDS

The forms of lids naturally depended on whether it was a *deg*, a jug, a bowl, a dish or a bottle to be covered. Generally, they were dome shaped, slightly tapering down to the edges which are concave or sometimes straight or oval, but rarely convex. At the top of the lids were knobs—round, oval, pointed or cusped.

To keep food-stuff or other articles, small containers covered with lids were used. One of its type represented in pl. 119 *Razm* (Jaipur) has high sides, slightly projecting outwards with a flat base and a dome-shaped lid with a pinnacle at the top, similar to the lid of a *qāb*. It covers a round, deep pot.

WINE-POTS

Drinking-cups (*Piyālās*)

A great variety of their forms and designs are seen in the miniature paintings. Mostly they are small and invariably possess wide openings, with the sides gradually narrowing towards the base (Pl. XXXVIII). A few have flat bases whereas others rest on a kind of platform. The stand which supports the bowl varies in height. The *piyālās* sometimes have lids. A *piyālā* without a lid—nowadays known as a *jām*—is represented on f. 54 *Akb* (CB) and consists of a cylindrical body, opening like a funnel. In large cups, the body is more elongated than the base.

Wine-containers

The containers are of two types, distinguished by the absence or presence of handles and spouts. The plain ones are the *surāhīs* (Pls. XXXIX-XL). They have long graceful necks, with flower- or funnel-shaped mouths. Generally, the body is round, almost spherical. Their necks can be straight or narrow in the middle or curved on one side, or serpentine

[4]*Razm*, pls. 9, 18, 37, 84, 88, 114, 128, 138 (Jaipur).

in form. Short-necked *surāhīs* are occasionally found. *Surāhīs* may or may not have a stand.

Surāhīs could be carried along in leather cases, each provided with a sling. The case covered the whole body of the pot, leaving the neck bare. Apart from these, bottles made of leather and resembling the *surāhī* in form, used even nowadays in Rajasthan, could be carried by people and by soldiers on expeditions (Pl. XXXVI, Fig. 12). They could be slung across the shoulder or fastened round the waist by a string fastened to the top of the lid. The second type includes what is called a *mīnā* in Persian (Pls. XLI-XLII). *Mīnās* are tall, beautiful *surāhīs*, with long spouts emanating from the middle or the lower part of the body. Spouts are shaped like the stiff neck of a swan. There may be only one handle, or two on the opposite sides, scaling the entire length of the pot, beautifully and elegantly curved. The double-handle *mīnās* do not have a spout. Instead, they open like *surāhīs* and are provided with lids. Rarely do we come across *mīnās* with one handle and opening like the *surāhīs*. In f. 208 *Bāb* (BM) three *mīnās* are shown. Their double handles are shaped like the two arms of a bow, each emanating from the middle of the pot and curving upwards with the ends attached by means of gold or silver chains to the centre of the lid at its top.

Besides the *surāhīs* and *mīnās*, there are beautiful jars, generally tall and hemispherical, with small necks and bases (Pl. XLIII). The jars are larger than *surāhīs*. Mostly, they are broad at the centre, and the sides gradually taper towards the base. Their lids are not different from those of *piyālās* in form and decoration. The jars with funnel openings closely resemble the bowls.

CUTLERY

Cutlery includes only spoons and knives. The spoons have long stems (Pl. XLIV, Fig. 30) with round or leaf-shaped ends like the present-day soup-spoons. These are shown being used in much the same way as we do—between the tips of the forefinger, and the middle-finger and the thumb. The knives are smaller than daggers. The handle of a knife is plain, more or less rectangular. The blade is long, one-edged and curved at the point. These are shown being used for cutting large pieces of roasted meat. There is no device like the fork to assist in cutting. This was done with the fingers of the left hand.

DECORATIVE UTENSILS

Flower-pots (Pl. XLVI, Figs. 12-15) are of various types: conical or round like a pitcher, with a long or short neck, and with a high or low base. A round flower-pot could have handles on both sides. They are also decorated.

A flower-pot can have two or more spouts about it for holding bouquets. Plate 12 *Razm* (Jaipur) shows a typical form of a flower-pot—a large bowl, with a high base, the ends projecting upwards.

Candlesticks, hanging lamps and the *zair-i itradān* are other decorative utensils represented in the paintings. The *zair-i itradān* is a high stand, the height of which varies, with a cup-shaped hollow at the top to hold the containers of perfume (Pl. XLVII, Figs. 1-2). The stem can be simple or ornamented with the spheres of varying sizes.

The candlestick held a wax-candle at the top, for which a small, deep cup is provided. Their stands are invariably straight and flat at the base (Pl. XLVII, Figs. 3-4). These are of different heights, approximately from 75 to 90 cm. Abu'l Faẓl has mentioned various types of candlesticks.[5] These could be embellished with one or two or more branches provided with cups at the top.[6] The branches were richly ornamented with stylized forms of flowers, leaves, buds, etc. Animal figures, i.e. birds etc., were equally favoured to decorate them. Miniatures display only *yakshākha*—a single candlestick.[7] Small candlesticks were provided with shades. Abu'l Faẓl mentions the shades but has not given any description of them.[8] A great variety of them must have been in use those days. The illustrations represent only one type of shade (Pl. XLVII, Fig. 5). It shows a metallic cage moulded in the form of a semi-ellipse. The nature of the material covering the metallic cage is not known. Wax-candles were commonly used and were made of different sizes. The largest of them could be cast three yards in length, and to snuff it out a ladder was used.[9]

Besides the wax-candles, oil-lamps were used both inside and outside the palace. Hanging oil-lamps provided with several wicks are rarely represented.[10] The lamp consisted of a small bowl with a wide opening. It has three rings on its rim from which the chains are passed to hang (Pl. XLVII, Fig. 6). It is typically Indian in origin and fashion. Abu'l Faẓl has mentioned that flambeaus were commonly used.[11] The number of wicks in each flambeau was lessened or increased according the darkness of the night. Mustard oil was commonly used in the lamps, though in some places grease was burnt instead.

Grace, decorativeness, elegance and symmetry are the chief characteristics of the Mughal utensils. Stylized and geometric decoration has been used without interfering with the beauty of the form. Particularly interest-

[5]*Ā'in-i Akbarī*, tr. Blochmann, I, p. 51.

[6]*Ibid.*, pl. V, fig. 1. Double candlestick (*dūshākha*); fig. 2. Fancy candlestick with pigeons; fig. 3. Single candlestick (*yakshākha*).

[7]Candlesticks with one branch were called '*Yakshākha*'. *Ibid.*, pl. V. fig. 5.

[8]*Ibid.*, p. 51.

[9]*Ibid.*

[10]*Razm*, pl. 12 (Jaipur).

[11]Blochmann, *op. cit.*, p. 51.

ing examples are seen in the forms of *surāhīs* and *mīnās* with their zigzag or serpentine necks and their beautifully curved handles.

According to the *Ā'in*,[12] great care was taken to preserve the shape and the metal of the utensils. Metallic utensils were polished with tin every few months. This practice is still prevalent in India and it is quite possible that it was introduced by the Muslims.[13]

The utensils used in the court—serving-dishes, wine-pots and other vessels—were made of copper china-clay, gold and silver. Gold and silver utensils were often studded with precious stones. Abu'l Fażl has stated that the stock of dishes and other utensils was maintained by the pantry clerk.[14] To distinguish them, dishes made of gold and silver were tied in pieces of red cloth, whereas those of copper and china clay in pieces of white cloth. With the passage of time, the utensils of the early Mughals got destroyed. The *Ā'in* also tells us that the old and used utensils made of copper were periodically replaced by new ones.[15] Those made of gold and silver were melted. The VA however, has a gold spoon studded with rubies and diamonds which is said to have belonged to the time of Akbar (Pl. XLV).[16]

[12]*Ibid.*, p. 61.
[13]Ray, (ed.), *History of Chemistry in Ancient and Medieval India*, p. 217.
[14]Blochmann, *op. cit.*, p. 61.
[15]*Ibid.*
[16]Welch, *The Art of Mughal India*, p. 31, pl. 20.

6 musical instruments

Music has always been a necessary accompaniment of court life, one of the chief sources of entertainment for the royalty. It has also been a source of inspiration on the battlefield. The Mughal court encouraged music in India and the Mughal kings were patrons of some of the greatest Indian musicians. Both vocal and instrumental music was cultivated under the patronage of Akbar.[1] Abu'l Faẓl gives the names of 36 principal musicians.[2] Among the musicians, there were both men and women, who belonged to different religions and countries: Hindūs, Iranis, Turanis, and Kashmiris. At the order of the Emperor musicians played their instruments daily. They were divided into seven groups to facilitate work. These divisions performed alternately, once a week.[3]

Naturally, musical instruments, too, found an important place. Abu'l Faẓl has described a variety of these instruments, a few of which were the innovations of musicians of the Mughal court,[4] such as Qāsim Koh-bar who invented one which was a mixture of the *qūbūz* and *rubāb*.[5]

The representation of musical scenes is important in the visual arts enabling us to observe their evolution and types. A great treasure of the documentation of instruments has been lost, yet a large variety of them can still be seen in the miniature paintings. Their depiction on a two-dimensional surface represents the object from one angle only and, therefore, the textual evidences are equally important for their study. Further, the musical instruments painted in the miniatures are too small and hardly depict all the details, viz. the rendering of strings or frets, etc. These are either omitted or suggested in simplified forms.

A scene wholly depicting a musical function is wanting in Akbari illustrations. It is only in connection with a feast or a festival that the musicians appear, their representation being linked to a number of rites and ceremonies. For that reason, only a few of the musical instruments

[1] *Ā'in-ī Akbarī*, tr. Blochmann, I, p. 681.

[2] *Ibid.*, pp. 681-82.

[3] *Ibid* , p. 681.

[4] *Ibid.*, pp. 52-53 for *Naqāra*, *Damāma*, *Duhul*, *Surnā*, *Qarnā*, *Seeng*, *Nafīr* and *Sanj*; *for Sarmandal*, *Bīn*, *Ney*, *Ghichak*, *Taṃbūrā*, *Qūbūz*, *Rubāb* and *Qanūn*, see *ibid.*, pp. 681-82

[5] *Ibid.*, p. 682.

used in those days come to our view. The musical tradition of Akbar's court has a strong affiliation to Persian and Arabian music. The instruments are the same as were common in Iran, and which we so frequently encounter in the odes of Ḥāfiẓ, Jāmi and Firdausi. The *rubāb* is the most prominent of them.[6] Then comes the *nai* or the vertical flute and the *nafīr*, the prototype of the modern *nafīrī*. Among the percussion instruments, there are the *duhul* (Indianized as *dhol*) ; the *chang* and *daf*. We also find the *damāma*, which was the largest drum used for announcing the commencement of war, the *naqāra* or the small kettle-drum, the *qarnā* and *surnā*. The *naqāra* seems to have been of Arabic origin. It was first known to exist in tenth century Arabia. The *tablā*—the ancient percussion instrument of Arabia—latterly became so popular that the term *tabl* represented the family of drums, viz. *tabl naqāda*, *tabl-qlmārkāb*, and *tabl-taoeel* (long drum).[7] Of them, the *tabl naqāda* became very popular in India with the advent of the Muslims. The rapid spread of Islamic culture caused, to a great extent, the migration of instrumental types, and with the existing Indian instruments there resulted a curious syntheses of shapes.[8] Besides these, other instruments are displayed as accompaniments to the dance. The *ghungrū*, *sanj* (*jālrā*), *tālā* (*manjeerā*) *mirdngā*, *vīnā*, *taṃbūrā* and *awāj* are typically Indian and seem to have won their way into the Muslim court long before the advent of the Mughals, by virtue of their intensely rhythmic quality.

CYMBALS

The Sanj

This is similar to what in Hindi is called the *jhānijh* (Pl. XLVIII, Fig. 1). It consists of two separate plates, about 25 cm. in diameter. Each plate has a flat edge and a concave centre. At the centre of the depression are holes from which emerge two small pieces of string knotted on both sides. Each plate was held in one hand by the strings. The concave sides of the plates are the inner surfaces which were struck together. The cups act as resonants for the sound. The *sanj* greatly resembled the *jhārijhā*,[9] a large cymbal, specially used in Hindu temples. The former is invariably shown along with the musical instruments played in the royal *naqāṛkhānā*. In effect, the *sanj* resembles the cymbal.

[6]It is difficult to ascertain whether the *rubāb* is a foreign or autochthonous instrument. Day has mentioned that in ancient Saṇskrit literature the *rubāb* has been described as a form of the *vīnā* (Day, *The Music and Musical Instruments of Southern India and Deccan*, p. 102). Goswami *The Story of Indian Music*, p. 298, is of the opinion that it is the modified form of the *rūdra vīnā*.

[7]Goswami, *op. cit.*, p. 311.

[8]*Encyclopaedia of World Art*, X, p. 433.

[9]Popley, *The Music of India*, p. 127.

The Tālā,[10] *or Manjeerā, or Manjvā, or Jālrā, or Kaitālā*[11] (Pl. XLVIII, Figs. 2-3)

The *tālā* consisted of a pair of cup-shaped pots. It was made of brass. At the centres of these cups were a small piece of string knotted on both ends. Its other form was like a saucer with a cup-shaped depression in the middle. It was an instrument of indefinite pitch and was played by striking the edges or rubbing the flat margins of the saucers.

The *tālā* was invariably used in a pair, one in each hand. Both men and women played it in accompaniment to other musical instruments.

BELLS

The Ghantā[12]

Like the *tālā*, this instrument (Pl. XLVIII, Fig. 7), too, won its way into *bhajans* (devotional music) and various ceremonies. It is always played alongwith other musical instruments, such as the *tālā, mirdangā*, and *dhol*. It is a flat, metallic disk provided with a loop at the centre, through which a string is passed to hold it. The sound is produced by striking it with a wooden stick.

The Ghungrū

The *ghungrū* (Pl. XLVIII, Fig. 6) is an essential accompaniment of an Indian dancer. Several hollow balls of brass, with small metallic grains inside them are strung together in two or three rows on a leather or cotton strap long enough to encircle the ankle. The *ghungrū* is tied by a hook or by strings just above the ankles (*Akb*, f. 143 CB). Always, a pair of them are worn on each leg.

Metallic bells of different shapes and sizes—hemispherical, cup-shaped, and round—were used for the ornamentation of the harness of a horse, elephant, camel, etc. Round bells were tucked in a row on a long, narrow strip of cloth or leather, fastened round the neck of the animal. This is still seen in villages today. The villager is proud to own an animal and delights in beautifying it.

WOOD BLOCKS

The Katha Tālā,[13] *or Chittikā* (*Castanets*)

It is an instrument of indefinite pitch, consisting of two fish-shaped pieces of hard wood or stone, as long as the palm (Pl. XLVIII, Fig. 8).

[10] *Ā'in-ī Akbarī*, tr. Jarrett, III, p. 270.
[11] Popley, *op. cit.*, p. 127.
[12] *Encyclopaedia of World Art*, X, p. 441.
[13] Jarrett, *op. cit.*, III, p. 270.

These are rattled between the thumb and the fingers of the hand of the dancer, who could have a pair of them, separately, in both palms, at a time. The inner flat surface of these two pieces are struck together by alternately closing and opening the fingers, marking the rhythm of the dance and vocal recital. For the grip, a ring is usually attached to the back of each piece through which the finger is slipped. Both male and female dancers used them.

FLUTE-LIKE INSTRUMENTS

The Shankh, or Shainkhū (Conch)

The *shankh*, (Pl. XLVIII, Fig. 9) is a very ancient wind instrument and is blown at almost all Hindū religious ceremonies and on all auspicious occasions.

The Surnā-i hindī[14] *(Vertical-Flute), Murlī,*[15] *or Bānsurī (Transverse-Flute),*

The word *surnā-ī hindī* is given by Abu'l Fazl to the flute. Indian musicians differentiate between the *bānsurī* and the *alghoza*. The former has six holes and another hole at a certain distance, nearer the upper end (Fig. 11). This is held sideways[16] and is played by holding it across the mouth, the embouchure touching the very centre of the lower lip. The *alghoza* (a vertical flute) is held in the front.[17] Instead of a whole, it has a lip or edge shaped like a broad quill with a narrow aperture (Fig. 10). The embouchure of the *alghoza* is held between the lips. The length of this instrument varied. The *alghoza* could be one span long.[18] Both male and female musicians played it. The vertical flute (fipple), popular in Persian music, got an important place at the Mughal court. It seemed to be a necessary accompaniment of the *daf* and other instruments (Pl. XLIX, Figs. 10-11).

The flute seems to be older and belongs to India from time immemorial.[19] Its associations with the Hindū god Krishna and its simplicity account for its popularity among the Indian people.

LIP-BLOWN INSTRUMENTS

The Surnā and the Nafīr[20]

Abu'l Fazl has mentioned the *surnā* and the *nafīr* as two separate ins-

[14]Blochmann, I, *op. cit.*, pl. VIII, fig. 7.

[15]Jarrett, *op. cit.*, III, p. 271.

[16]*Razm*, pl. 134 (Jaipur).

[17]*Akb*, pl. 79 (VA), f. 143 (CB); *Tā'rīkh*, ff. 4, 90, (Patna); *Razm*, pl. 12 (Jaipur).

[18]*Cyclopaedia of India*, III, p. 441.

[19]Wellesz, (ed.), *The New Oxford History of Music—Ancient And Oriental Music*, I, p. 222; Goswami, *op. cit.*, p. 307.

[20]Blochmann, *op. cit.*, I, p. 53, pl. VII, figs. 6, 7.

truments. The pictures of these instruments given in the illustrations[21] help us to differentiate between them. The former has small holes on the stem and is played like the flute (Fig. 13). The present day *nafīrī* seems to have retained its form from the *nafīr*. These are long tapering instruments, a pipe opening in the form of a funnel. From Abu'l Fazl's description, however, it appears that the *surnā* was more popular in the court as part of the whole royal band.[22] He mentions that in the *naqār-khāna*, nine *surnās* were played at one time. The *surnā* and *nafīr* both accompanied the *naqārkhāna*. However, the latter seems to be mostly associated with the instruments performed at festivities etc.

Abu'l Fazl[23] also distinguishes the *Hindī-surnā* from the Persian *surnā*, called the *shāhnā*.[24] This evidently refers to the distinction between the Persian *surnā* and the *bānsurī* or the *alghozā*. Three kinds of *nafīrs* are mentioned—Indian, Persian and European. We have a few paintings depicting this instrument. Abu'l Fazl does not clarify the distinction, between the three, and the paintings are not very helpful either (Pl. XLIX, Figs. 12-13).

The Qarnā[25]

The *qarnā* was the longest of the pipes—it could be up to 3.60m. long.[26] It was of three types—straight, curved like the partial arch of a large circle or intricately curved like an 'S,' with elongated arms. The *qarnā* was a typical battlefield instrument. There were no holes in it and it was played like a bugle. The lower end was a thin pipe with a small cup-shaped embouchure to fit the lips. The upper arm was an elongated funnel. According to the *Ā'in*, the *qarnā* was made either of brass, or silver, and sometimes even gold[27] (Pl. XLIX, Figs. 14-21; Pl. L, Figs. 1-6).

The Seeng[28]

The *seeng* (Pl. L, Figs. 7-10) was also used on the battlefield.[29] It was made of brass and acquired its name from resemblance to the smoothly curved horn of a cow.[30] In fact, it seems that the original Indian instrument, of which the *seeng* is a refined copy, must have been made out of the horn of the cow, the kind of which may still be observed in the villages, specially in the hills. The *seeng* also does not have any holes in it.

[21]*Akb*, pls. 8, 79 (VA), ff. 19, 143 (CB); *Razm*, pls. 83, 87, 89, 108, 110, 119, 145 (Jaipur); *Tā'rīkh*, ff. 20, 24, 67, 136, 205, 253, 254, 284 (Patna).

[22]Blochmann, *op. cit.*, pp. 53-54.

[23]*Ibid.*, pl. VII, figs. 6, 7.

[24]Jarrett, *op. cit.*, III, p. 270.

[25]Blochmann, *op. cit.*, I, p. 53, pl. VIII, figs. 3-5.

[26]*Cyclopaedia of India*, III, p. 441.

[27]Blochmann, *op. cit.*, I, p. 53.

[28]*Ibid*, pl. VIII, fig. 9.

[29]*Razm*, pls. 72, 88, 89 (Jaipur).

[30]Blochmann, *op. cit*, I, p. 53.

A primitive form of the *seeng* comprising a hollow, long wooden piece, curved like a horn, is once represented in the *Razm* (Baroda).[31] The lower end of this instrument is a thin pipe with a small cup-shaped embouchure (Pl. L, Fig. 10).

KETTLE-DRUMS

Naqāra[32]

The *naqāra* (Pl. LI, Figs. 11-12, 14) is a one-surface drum and is larger, about 45 to 53 cm. in height. Its drum is like a big bowl, almost round. In later times, we come across bigger *naqāras* also. The parchment used may be 60 to 90 cm. in diameter,[33] but the *naqāras* used in musical performances do not seem to have been larger. These were played singly or doubly by one person. It was always beaten with sticks. These could also be loaded on horseback or on camels and carried to hunting-grounds where they were beaten to drive animals into traps.

The Damāma[34]

The largest drum was called *damāma* (Pl. LI, Fig. 13). It varied from the *naqāra* only in size. It could be as high as 1.50 m. and correspondingly broad at the surface.[35] It was beaten with two large, thick sticks by one man. The *damāma* could hardly be called the instrument of rhythm, although rhythm was possible. Its function arose from its resonance during battles or from distances. For that reason, it was an indispensable part of camp paraphernalia. It seems that the *damāma* was also used for announcing certain fixed hours as well as for announcing some important routines of the king.

FRAME DRUMS

The Daf[36] (*Tambourine*)

The term *daf* has been used for both the circular and rectangular kinds of frame-drums (Pl. LI, Fig. 15).[37] Day has described it as an octagonal frame-drum, about 15 cm. deep and 90 cm. in diameter.[38] This instrument originally belonged to ancient Arabia and later became popular in Persia

[31]*Razm*, pl. 30 (Baroda).
[32]Blochmann, *op. cit.*, I, p. 53, pl. VIII, fig. 10.
[33]Popely, *op. cit.*, p. 125.
[34]Blochmann, *op. cit.*, I, p. 52, pl. VIII, fig. 2.
[35]Popley, *op. cit.*, p. 125.
[36]Jarrett, *op. cit.*, III, p. 270.
[37]Wellesz, *op. cit.*, p. 442.
[38]Day, *op. cit.*, p. 270.

as well.[39] It won great favour from the Mughals and held an important place in dance and vocal recitals. Both male and female musicians and dancers played on it. The *daf* is a single-sided drum, made like a sieve, one side of which is covered with parchment. The performer held the wooden frame with one hand and with the other beat upon the drum. It had no cymbals.[40]

The Khanjarī,[41] *or Chang*[42] *(Tambourine)*

This instrument resembles the *daf* in shape, but is smaller and has, in addition, small, metallic disks hung loosely in slits around a hoop (Pl. LI, Fig. 16). The number of slits varied from three to four.[43] These disks tinkled with the movements of fingers and the hand, adding rhythm to the dance. The dancer herself or a companion of hers holds it by the wooden frame and beats it with the fingers of the other hand, occasionally shaking the instrument briskly to the rhythm of the dance.[44]

TUBULAR DRUMS

The Duhul,[45] *or Dhol*[46]

The *duhul* (Pl LII, Figs. 2.5) is very much like the *dholak* of our days. An almost elliptical drum is covered on both sides with skin, the edges sewn with gut or leather interwoven in the form of a rope and tied like a loop about the ends. Through these loops run leather braces or a long string or rope connecting the skins on both sides with alternate loops. When these loops are pulled, the leather laces alike pull upwards more tightly about the tapering surface of the drum and the skin is stretched simultaneously and becomes more tense. The tension of the skin controls the tone of the sound. The *duhul* was played upon with two sticks, one in each hand, or by the fingers alone.[47]

A *dhol*, very similar to the *dholak* of modern times, is represented in the *Razm* (Jaipur).[48] It was played in accompaniment to other musical instruments to mark the rhythm of a dance or vocal recital. The *dhol* was

[39]Goswami, *op. cit.*, p. 310.

[40]Jarrett, *op. cit.*, III, p. 270.

[41]"The *Khanjarī* is a tambourine smaller than the *Daf*, but with cymbals, and its surface is about the size of a pitcher." *Ibid.*

[42]Steingass, *s.v. chang.*

[43]Jarrett, *op. cit.*, III, p. 27, n. 33.

[44]*Akb*, ff. 54, 147 (CB), pls. 8, 79 (VA); *Anwār*, ff. 5, 308 (Varanasi); *Dīwān*, ff. 30, 116, 241 (Rampur); *Tā'rīkh*, 4, 40, 72, 90, 132, 205 (Patna).

[45]Jarrett, *op. cit.*, III, p. 270.

[46]"This is the Persian equivalent of the ordinary *Dhol* of Hindustān." *Ibid.*, p. 270, n. 31.

[47]*Anwār*, f. 190 (Varanasi); *Akb*, pl. 8 (VA), f. 143 (CB); *Tā'rīkh*, f. 70 (Patna).

[48]*Razm*, pl. 72 (Jaipur).

played upon with two sticks, one in each hand. The *dholkī*, *dāk*, etc., are other kinds of *dhols* of varying sizes.[49]

The Pakhāwaj,[50] *or Mirdanga*

It is the most ancient percussion instrument of India. Day has mentioned the *pakhāwaj* (Pl. LII, Figs. 1,4) under the name of *mirdanga*.[51] Both these terms have been accepted for this myrobalan-shaped drum. The *mirdanga*, meaning earthen body, is also called the *pakhāwaj* (*paccā awāj* or pure sound).[52] Abu'l Faẓl has given a graphic description of it in the *Ā'in*.[53] It was made from one piece of hollow wood, shaped like a plum and about 90 cm. in length. Both the parchment heads are approximately between 18 to 23 cm. The leather strings were stretched on the same principle as of that kettledrums, *duhuls*, etc., except that four pieces of wood were inserted between the shell and braces on the left side of the instrument.[54] These pieces served to tune it. The performer used hands, finger-tips and wrists to play. While in use the instrument is hung with a string passing around the neck. Two of its forms[55] are represented in the miniatures.

The Awāj,[56] *or Udukkū*[57] *(Hourglass Drum)*

The *awāj* (Pl. LII, Fig. 3), a musical instrument of indefinite pitch, was played upon with the palm and the fingers in accompaniment with other instruments during festivities.[58] It consisted of two small bowls, nearly hemispherical, joined at their bases. It was made of hollow wood and may be described as two kettledrums joined at the reverse ends. Both the parchment heads of the *awāj* were made on the same principle as the *duhul*.

The Damrū, or Budbudikā[59] *or Nidukkū*[60]

It is smaller in size than the *awāj* and is made on the same principle as the latter, except that a string is wound round the middle of the instrument, leaving its ends loose (Pl. LII, Fig. 6).[61] A small stick or a ball of some hard substance is fastened to the end of the strings. The performer

[49]Popley, *op. cit.*, p. 225.
[50]Jarrett, *op. cit.*, III, pp. 269-70.
[51]Day, *op. cit.*, p. 270.
[52]Popley, *op. cit.*, p. 123.
[53]Jarrett, *op. cit.*, III, pp. 269-70.
[54]These pieces of wood do not occur in the forms of the *pakhāwaj* represented in the miniatures. *Razm*, pls. 12, 89, 121, 127 (Jaipur).
[55]See n. 59 (*supra*).
[56]Jarrett, *op. cit.*, III, p. 270.
[57]Popley, *op. cit.*, p. 126.
[58]*Akb*, pl. 79 (VA).
[59]Shanti Swarup, *Arts and Crafts of India and Pakistan*, pl. XLVI.
[60]Popley, *op. cit.*, p. 126.
[61]*Razm*, pl. 41 (Jaipur).

held the *damrū* in the middle and shook it transversely, the ball at the end of the string consequently beating upon the sides of the drum.

The *damrū* is an old instrument of India and is associated with the Hindu god Shiva. Today it is commonly heard (immediately attracting the attention of children) as the accompaniment to the *bandar-kā-naach* (monkey dance).

LUTES

The Rubāb[62]

According to Bābur, the *rubāb* (Pl. LIII, Figs. 1-3) was made from the larger shells of the coconut fruit, to which was attached a long hollow piece of wood.[63] One bridge, known as *ghurj gain*,[64] was placed on the centre of the shell, called the *mand* and the other on the top. The number of strings of this instrument varies. Generally, it had six strings, sometimes twelve or eighteen.[65] To stretch the strings, six knobs are attached to the end of the neck. The strings could be of gut or metal. It was played with a plectrum—triangular in form, called the *jabs*.[66] It had no frets. The neck could be straight, or curved at the end. The *rubāb* greatly resembles the mandolin of our days.

The Vīnā,[67] *or Bīn*,[68] *or Bīn-Sitār*[69]

It is one of the oldest string instruments of India. The *vīnā*, sometimes known as the *bīn*, greatly resembled the *yāntrā*,[70] mentioned by Abu'l Faẓl (Pl. LIII, Figs. 5-6). Its neck is formed of a hollow piece of wood, about 90 cm. in length. Two resonators, made of halves of pear-shaped gourds, are attached below both the ends. The *vīnā* is a fretted plucked instrument and has three strings made of steel.[71] The bridge is placed on the bowls. The player holds it either in a horizontal position across the knees or over the left shoulder, the upper gourd resting on the shoulder, and the lower one on the right thigh.[72] This instrument is played with the fingernails or a plectrum. The high and low notes are produced

[62] Jarrett, *op. cit.*, III, p. 269.

[63] *Bāburnāma*, tr. Beveridge, II, p. 504.

[64] Goswami, *op. cit.*, p. 298.

[65] Jarrett, *op. cit.*, III, p. 269. (This instrument is also furnished with four strings only: cf. Steingass, *s.v. rubāb*.)

[66] Goswami, *op. cit.*, p. 298.

[67] Jarrett, *op. cit.*, III, p. 268.

[68] *Ibid.*

[69] Shripada Bandoypadhaya, *Music of India*, p. 17.

[70] Jarrett, *op. cit.*, III, p. 268.

[71] *Ibid.*, (This instrument is also stringed with five or seven steel wires: cf. *Cyclopaedia of India*, III, p. 442; *Colliers Encyclopaedia*, Vol. X, p. 71.)

[72] *Akb*, pls. 21, 23, 50, 75 (VA), f. 143 (CB); *Tā'rīkh*, ff. 4, 76, (Patna); *Razm*, pls. 12, 118 (Jaipur).

by the disposition of frets. Other lutes, known as the *sār vīnā*, *amritī* and *kingārā* closely resemble the *vīnā*.[73]

The Ghichak[74]

The *Ghichak* (Pl. LIII, Figs. 7-8) an instrument with two main and eight sympathetic strings, was played with a bow of horsehair.[75] It had a long neck, gradually tapering towards the lower end, to which the shell of a large gourd was attached. The performer held it vertically.[76] This instrument greately resembles the *kamānchā* (an Arabic instrument), usually found with two strings.[77]

The Taṃbūr, or Taṃbūrā[78]

The *ṭaṃbūrā* (Pl. LIII, Fig. 9), too, is an old instrument like the *vīnā*, related to the Persian *ṭambūr* and Hindu *taṃbūrā*. The classical vocalists used it. During the early Islamic period, the *taṃbūr* was made of a long neck and two strings.[79] It later became a four-stringed[80] instrument with catgut strings[81] instead of wire, to be played with a bow of horsehair.[82] It can also be strummed with the fingers on open strings.[83] Its long, narrow neck is attached to a bowl-shaped gourd resonator, the open portion covered with parchment. The bridge is placed on the centre of the gourd. Unlike the *rubāb* and *vīnā*, its neck is not fretted and has two or four knobs to fasten the strings on the end.

On pl. 127 of the *Razm* (Jaipur) is seen a typical stringed instrument, the name of which is yet to be ascertained.[84] It strongly resembles the *rubāb*. It was played upon with a plectrum like the latter. An extra small gourd resonator, connected with the upper end—(most probably to produce a higher pitch), seems to be the innovation of some musician (Pl. LIII, Fig. 4).

The instruments mentioned above are just some of which were used in India during those times, and except for a few, i.e., the *ghantā*, *murlī* and *damrū*, they were typically court instruments. The *pinak*, *kingārā*, *sārangī*, *amritī*, *adhatī*, *surmandal*, *qübüz*, *kinnar*, *mashk*, *upang*, etc., men-

[73]Jarrett, *op. cit.*, III, pp. 269-70.
[74]*Ibid.*, p. 269.
[75]Wellesz, *op. cit.*, p. 455.
[76]*Akb*, f. 147 (CB).
[77]Wellesz, *op. cit.*, p. 455.
[78]Blochmann, *op. cit.*, I, p. 682.
[79]*Colliers Encyclopaedia*, II, p. 96.
[80]*Ibid.*
[81]*Cyclopaedia of India*, III, p. 441 (H.A. Popley says that the strings of the *Taṃbūrā* are all of metals: cf. *op. cit.*, p. 113.)
[82]*Tā'rīkh*, ff. 4, 40 (Patna).
[83]*Colliers Encyclopaedia*, X, p. 71.
[84]This musical instrument is a combination of the *rubāb* and the *qübüz*, and is probably the same as invented by Qāsim Koh-bar: Blochmann, *op. cit.*, I, p. 682.

tioned by Abu'l Faẓl, do not occur in the illustrations.[85]

The *naqārkhāna* was an important establishment of the Mughal kings. Akbar seems to have expanded both its composition and function. Abu'l Faẓl writes in detail about the various items as well as the *rāgas* and *rāganīs* which punctuated the daily routine of the court life.[86] Akbar had knowledge of the science of music and composed more than two hundred tunes. A special mention may be made of the *khwārizmite*, *jalāl shāhī*, *mahāmīr karkat and nawrozī*. These tunes were played regularly. The band played at midnight and at dawn.[87] The various musical instruments, and their number included in the *naqārkhāna*[88] were: kettle-drums—the *damāma* (18 pairs), the *naqārā* (20 pairs), the *duhul* (four), the *qarnā* (four), the *surnā* (nine), the *nafīr* (a few of each kind—Persian, European and Indian), the *seeng* (two), and the *sanj* (three pairs). Their numbers could vary. Among the sole items, the *surnā* was blown before sunrise. This was followed an hour later by the *kwārgā*, *qarnā*, *nafīr* and other instruments. Finally, the band concluded with the performance of the *surnā*.

It is obvious that each item had a particular significance. The kettle-drum held the most important place in the *naqārkhāna*. It was considered an ensign of royalty and a mark of dignity. Drums made of gold or silver were presented to the Emperor on auspicious occasions and were conferred on nobles etc., for their brave deeds [89] Kettle-drums, as an emblem of royalty and military status, appeared about the tenth century among the nomads of Central Asia.[90]

The ornamentation of the musical instruments was done on the neck, keyboard and resonators. Often, the upper end of the neck was delicately carved, in a stylized form with motifs of flowers, heads of animals, etc. The resonators of the *vīnā*, *tambūrā*, *rubāb*, etc., were decorated with lines, geometrical patterns and floral designs.

[85] *Ibid*, pp. 681-82; Jarrett, *op. cit.*, pp. 269-70.
[86] *Ibid.*, I, pp. 53-54.
[87] *Ibid.*, p. 53.
[88] *Ibid.*, pp. 52-53.
[89] See footnote 7, Chapter 7.
[90] *Colliers Encyclopaedia*, XI, p, 280.

7 ensigns of royalty

From time immemorial, kings have used various ensigns symbolizing dignity and power. The ensigns or emblems are conventional visual devices to represent persons and their ranks. Abu'l Fazl considers the fondness of the king for external splendour a reason for the adoption of such symbols.[1] The insignia that he mentions in the *Ā'in* belong to the court of Akbar but seem to have been inherited from earlier times.[2] The Muslims added the emblems of sovereignty and they included the sun, the tiger, the ibex and a set of standards ending in golden disks, globes, the head of a dragon, animals' heads, spear-heads etc.[3] All of these emblems have been depicted in the Mughal paintings.

The stylized head of a bird, with an elongated beak and a curved neck, is a symbol frequently encountered. The geometric designs composed with a hexagon, a triangle, a circle, symmetrical figures of utensils, etc., are common, but not so the snake, the dragon, the elephant and the human head. The heads of animals—wild-goat, stag, tiger, horse, sheep and a dragon (symbol of heaven)—employed in the ornamentation of the thrones, boats, arms, etc., are not merely decorative, they are symbolic. Different colours, e.g. scarlet, orange, green or purple, used in the standards and flags are symbolic too. In the Islamic world, coloured emblems were known from the earliest times. A special mention may be made of different colours, e.g. green, black, white and red. These were the signs of some factions.[4] Dresses, arms, standards, drums (kettle-drums), etc., too, were considered the ensigns of military rank. Robes of honour were bestowed on nobles and military chiefs. The *chārqāb*[5] or a *nādirī*[6] was bestowed as a mark of rank and distinction. Arms included

[1]*Ā'in-i Akbarī*, tr. Blochmann, I, p. 52.

[2]*Ibid.*, pp. 52-53.

[3]*Encyclopaedia of World Art*, IV, pp. 719-20.

[4]*Ibid.*, p. 723.

[5]The *Chārqāb* is a kind of robe of gold embroidery made with or without sleeves: *Tabaqāt-i Akbarī*, tr. De, II, p. 480; *Tūzuk-i Jahāngīrī*, tr. Rogers and Beveridge, I, pp. 15 395.

[6]The *Nādiri* was a coat worn over the *qabā*, fastened in front with buttons. It was made of gold brocade and is studded with pearls on the collar, etc: see Rogers and Beveridge, *op. cit.*, I, pp. 334, 384, 395, 397; II, pp. 90, 191, 237, 260, 275, 288.

the jewelled sword or dagger-belts, swords and daggers (*jamdar* or *khanjar*), set with jewels etc. The standards of yak-tails (especially the *tuman-toq*) and kettle-drums were conferred on the princes and high officials.[7]

Broadly speaking, there were three categories of insignia: the royal insignia, the use of which was the special privilege of the king; the insignia bestowed upon princes or used by them as a matter of course; and the insignia granted to distinguish nobles in recognition of some special services or to symbolize their status. Some of these were used on routine, whereas others were displayed on formal occasions. For all the ensigns depicted in the illustrations we have to depend for the terminology on what Abu'l Faẓl has listed in the *Ā'in*. The crown or turban has not been mentioned by him as an ensign of royalty, though in India it was among the highest symbols. The Mughal emperors had their turbans adorned with diamonds, a crest of pearls, a plume, etc. The princesses and queens wore long crown caps. Their various forms have been dealt with separately (pl. XXXII, Figs. 1-8).

The Aurang

The *aurang* (Pls. LIV-LV) or the throne was the first insignia of royalty. Several kinds of thrones must have been used by a king. It seems that the largest throne was placed in the main hall or *dīwān* where the king held court. The others, placed in smaller chambers, were used for special gatherings. The throne depicted in the camping scenes must have been specially made so as to be portable. In Indian history we come across several occasions when a prince was enthroned while away from the capital on receiving the news of the sudden death of a king. In such emergencies, humbler thrones must have been erected. Akbar, too, was confronted with such a situation and an earthen throne was built for his first coronation at Kālānaur.[8]

Abu'l Faẓl has briefly described the royal throne: "The *aurang*, or throne, is made of several forms; some are inlaid with precious stones, and others are made of gold, silver, etc."[9] Only two forms of *aurangs* are depicted on pl. 7 of the *Ā'in*. One of them is a hexagonal seat supported on six small, ornamented legs. It has railings on its sides and a high back surmounted by a *chhatra*—a royal umbrella. The main seat has a bolster as extra support for the back. The second consists of a square pavilion with its roof supported on four long columns. This is a rectangular seat, embellished with a railing all around, leaving a small space in front to enter. In front of it is placed a *ṣandalī* (footstool) to step up to the main seat.

[7] *Akbarnāma*, tr. Beveridge, II, pp. 143, 182; De, *op. cit.*, II, p. 578; Rogers and Beveridge, *op. cit.*, I, pp. 14, 87; II, pp. 222, 235, 259, 260.

[8] However, the illustration depicting Akbar's first coronation at Kālānur on f. 1 *Akb* (CB) displays an hexagonal seat similar to those observed in other miniatures.

[9] Blochmann, *op. cit.*, I, p. 52.

The thrones depicted in the illustrations must be those actually used by the emperor, for the painters must have drawn after careful observation. Some characteristics common to all, must have been traditional. The thrones used for holding court or for restricted audiences had a square pavilion, with a roof supported by four thin cylindrical columns, a main seat, and generally a *ṣandalī*. If the throne was supported on high legs (Pl. LV, Fig. 15), then besides the *ṣandalī* there was sometimes a stair. The seat was generally small and hexagonal. Square or rectangular seats were used less frequently.[10] The seat was generally with a short railing. The backrest would be approximately three to four feet high and shaped like a betel-leaf. Thrones used outdoors were either hexagonal, square or rectangular, without a pavilion, and were covered by a *shāmyāna* or a canopy. It has become difficult to categorize the thrones, as the painters have made no distinction between the thrones used inside and outside the palace. Similar thrones are represented in a camp or court scene. Only in a few cases, a royal chair without arms,[11] or a dais (*takht*)[12] cushioned with carpets etc., is shown in place of a throne. The paintings depicting the thrones still unoccupied or just left by the king are of greater importance.[13] These provide us with a full view of the throne. For instance, on f. 123 *Tā'rīkh* (Patna), a hexagonal seat with a high back, supported on six high, arched legs is depicted. At the front is placed a footstool. That, too, is hexagonal and is supported on six straight, small legs composed of spheres of varying sizes. The throne is embellished with inlay work of precious stones and metals The cushion is reminiscent of the Persian carpets. The seat is simple and is about three feet high and just broad enough to accommodate one person.

Another throne, represented in a camp scene, has a flight of steps at the front to step on to the main seat.[14] The back is dome-shaped and is embellished with the royal umbrella. It has side-railings ornamented with geometrical patterns. A narrow band of plaited cloth girdles the throne at the base, leaving the legs bare. A similar throne is shown on f. 206 (*ibid.*), but without the steps. A large canopy shaped like an umbrella covers it. The most embellished throne is depicted on f. 136 (*ibid.*). In addition, it is decorated with yaks' tails attached to both sides of the back, crowned with the neck of a bird (Pl. LV, Fig. 14).

A unique throne, depicted on pl. 52 *Akb* (VA), is simple and rectangular. Its main seat is square. Square seats seemed to have been less

[10]*Razm*, pl. 9 (Baroda), pls. 27, 68 (Jaipur); *Anwār*, ff. 5, 205 (Varanasi); *Tā'rīkh*, ff. 62, 90, 254, (Patna); *Akb*, f. 201 (CB), pl. 23 (VA).

[11]*Tā'rīkh*, ff. 90, 126, 254, (Patna); *Akb*, ff. 147, 201 (CB), pl. 23 (VA).

[12]*Tā'rīkh*, ff. 89, 116, 148, 328, (Patna); *Akb*, f. 27 (CB), pls. 32, 96 (VA); *Bāb*, ff. 13, 35, 44, 163, 208 (BM).

[13]*Tā'rīkh*, ff. 123, 131 (Patna). All the three thrones depicted on 131 are similar in form to those displayed on 123, except for the ornamentation of the back and legs.

[14]*Ibid.*, f. 248.

favoured by the Mughals. In another instance on f. 90 *Tā'rīkh* (Patna), we find a square seat with a low back. It is smaller and hardly wide enough for one man to sit on comfortably. A throne with a rectangular or hexagonal seat could be made with or without railings and sometimes without legs (Pl. LIV, Fig. 7).[15] In the latter case, it was placed on a dais.

Royal Chairs

Royal chairs (Pl. LIV, Figs. 2-5) are always square, supported on four small legs composed of round spheres of varying forms and sizes. Their ornamentation is similar to that of the *aurang*. It seems that armchairs were not in vogue. The most richly designed chair depicted on f. 201 *Tā'rīkh* (Patna) has a support (arm-piece) on each side attached to the back, but it is purely decorative and hardly served the purpose. The main seat of the chair is invariably smaller than that of the throne. Such chairs could easily be carried by two men.

Royal Takht

The *tayyt* (Pl. LIV, Fig. 1) was the humblest seat occupied by the king. It could be made with or without legs like a dais. Its height varied from 30 to 45 cm. Generally, the *takhts* were rectangular and large. They could also accomodate the royal attendants, viz., insignia-holders, who kept close to the person of the king. The top of a *takht* was invariably covered with carpets. Its most decorative form is shown in pl. 96 *Akb* (VA). It is a hexagonal *takht*, embellished with side-railings and a six-sided canopy with a pinnacle, supported on six long, cylindrical columns. The railing is all around the main seat, leaving a small gate to enter. There are a few steps at the gate. Evidently, the seat rested at a height of two to three feet from the ground. Its ornamentation is found similar to that of the *aurang*. The *takhts* were mostly used outside the palace, and being large, often accomodated a number of men during feasts and festivities as we can see in ff. 257, 206, *Bāb* (BM).

Apart from these common characteristics, the thrones admitted considerable variety in the patterns of embellishment. For instance, the edges of the backrest were sometimes foliated or cusped. On it could be mounted a pinnacle the shape of a flame, or a bud, or a bird in stylized form, or two to three spheres with an arrowhead (Pl. LIV, Figs. 10-13). Occasionally, the royal-umbrella (*chhatra*) was connected with the backrest.[16] The legs were generally curved. A royal chair, or a *takht* could have short legs of ordinary shapes composed of two or three spheres of varing sizes. Others had high legs, curved or straight, ending in an animal's head—that of a cat, a tiger, a duck and sometimes, the claws (*panjā*) of a dragon (Pl. LV,

[15] *Anwār*, f. 5 (Varanasi); *Bāb*, f. 81 (BM).
[16] *Razm*, pl. 20 (Baroda), pls. 12, 37, 39, 65 (Jaipur); *Tā'rīkh*, ff. 136, 284 (Patna).

Figs. 16-24).[17]

The railings could be plain or indented, though they were frequently omitted altogether. Imperial thrones, used in the courts, were furnished with a *chhatra*, locks of yaks' tails on each side of the back seat, and ornamented high legs and no railings.

The *ṣandalīs* were smaller, usually hexagonal or rectangular, with short legs. The top of a *ṣandalī* was cushioned and ornamented with floral patterns.

The external decoration was furnished with profuse engravings and an abundance of precious stones, gold and silver chips, all studded in beautiful patterns, reminiscent of the costly Iranian carpets and of minute floral patterns of brocade of the medieval times. The seat was covered with thick cushions, probably of velvet but profusely decorated with gold thread. Bābur has incidentally mentioned a woollen throne-carpet, probably used during winter.[18] A jewelled throne, ascended by four steps, has been described by Gulbadan Begum.[19] It was used by Emperor Humāyūn during a feast given by Māham Begum. In the later accounts of Humāyūn's reign, we come across a few other references of thrones studded with precious stones, and embellished with a quilt and a pillow (*masnad*) embroidered with gold thread. Akbar's thrones, too, were inlaid with the costliest stones and were made of gold and silver.[20] K͟hwāja Niẓāmuddīn Aḥmad[21] has mentioned a golden throne inlaid with emeralds and rubies used on the day of *nau-roz*. Akbar's thrones are certainly not as ostentatious as one might expect, like those observed in the time of Shāh Jahān.[22] The thrones used by Jahāngīr, too, were highly embellished. One was made of silver and decorated with inlay work.[23] It was sent by Jahāngīr Qualī K͟hān of Gujarāt and was placed before the Emperor on New Year's Day. Another throne, described by the Emperor in his memoirs, was made at a cost of Rs. 4,50,000.[24]

After Akbar's reign, a variety in the material and embellishment of thrones was introduced. In the later period, we come across thrones made of stones or wood. A throne made of slabs of black stone was often used by Jahāngīr. It was brought from Allahabad by Daulat K͟hān. A seat known as *Tak͟ht-i-Shāh*, used by Bābur has been referred to by Jahāngīr. It was made of stone on the slope of a hill to the south of Kabul. During Shāh Jahān's reign, marble thrones were sometimes used. A marble dais

[17]*Akb*, f. 49 (CB), pls. 9, 27, 50, 75, 79 (VA); *Dīwān*, f. 19 (Rampur); *Razm*, pl. 86 (Jaipur); *Tā'rīk͟h*, ff. 89, 118, 123, 126, 182, 205, 206, 328 (Patna); *Bāb*, ff. 2, 417 (BM).

[18]*Bāburnāma*, tr. Beveridge, II, p. 678.

[19]*Humāyūn-Nāma*, tr. Beveridge, p. 113.

[20]Blochmann, *op. cit.*, I, p. 52.

[21]De, *op. cit.*, II, p. 555.

[22]See the description of the Peacock Throne in the *Bādshāh Nāma*, (Persian Text) I (ii), pp. 78-81.

[23]Rogers and Beveridge, *op. cit.*, I, p. 168.

[24]*Ibid.*, II, p. 80.

can still be seen in the hall of private audience in the Delhi Fort. Similarly in the Machi Bhavan side of the terrace of the Agra Fort, a rectangular slab of marble, supported on four legs, still exists.

The king is generally shown sitting on a throne, with his forelegs folded beneath him. He is fully dressed and is never without a crown. He is invariably attended by his nobles, standing in two rows before him, and by his personal attendants bearing the royal insignia—sometimes the *chhatra*,[25] but commonly the *chaurī* and *'alams*. In paintings, he is depicted engaged in State business, for instance, meeting a prince-governor, examining the heads of enemies, issuing instructions or inspecting booty. The courtiers and nobles stand on both sides of the main seat; in the Emperor's court nobody was allowed to sit. Even the high ministers of State, military officials, princes of other kingdoms, ambassadors, etc., had to remain standing. However, the princes of royal blood were often offered a seat. Bābur had granted a seat to Askarī in 1528.[26] In another instance, Jahāngīr allowed prince Khurram to sit in a chair placed near his throne.[27] The Emperor was so delighted at his victorious campaign in the Deccan that he conferred on him the title of Shāh Jahān and raised his rank and lastly, as a mark of exceptional favour, granted him a seat in the *durbār*. Jahāngīr has mentioned that it had never been a custom.[28] 'Abdur Raḥīm K͟hwāja was also allowed by Jahangir to sit in the court.[29] He enjoyed this privilege during the reign of Shāh Jahān as well.[30] It seems that in the later phase, high-ranking officers and princes were allowed to sit in private *durbārs*. During Akbar's reign, however, we find no mention of such a favour granted to anyone.

The Chhatra

The *chhatra* (Pl. LVI, Figs. 1-9) or the royal umbrella was second in importance only to the throne. It has, in fact, been a universal ensign of royalty. The monarchs of ancient India were called *chhatrapati*—those entitled to a *chhatra*. The *chhatra* is also used for Buddhist reliquary shrines and Hindu gods.[31] Among the Muslims, the practice of using the *chhatra* was quite old. In the Christian world and among the Chinese too, the umbrella has been a symbol of royalty. It seems to take its origin in the conception that a king was the representative of God on the earth and the *chhatra* was the symbol of divine blessings, the expression of God's protective shadow on his head.

The prop of the *chhatra* was usually very long. It could be fixed to a

[25] *Tā'rīk͟h*, f. 136 (Patna).
[26] Beveridge, *op. cit.*, II, p. 628.
[27] Rogers and Beveridge, *op. cit.*, I, p. 395.
[28] *Ibid*.
[29] *Ibid*.
[30] *Bādshāh Nāma*, *op. cit.*, I, (i), p. 194.
[31] *Encyclopaedia of World Art*, IV, p. 719.

throne[32] or carried by an attendant close to the person of the king outside the palace or in a battlefield.[33] Its practical importance lay in its being visible to everyone from far and near. One or more royal umbrellas could be held above or around the emperor.[34] There was a custom that kings with great power might have more than one *chhatra*.[35]

The *chhatras* depicted in the Mughal paintings are all of the same form, with slight variations in the shapes of their domes and in their decorative patterns. It is like a broad-based, small dome with a pinnacle. The base is girdled with a wide band and is ornamented with the costliest jewels. Plaited cloth hangs loosely at the helm. The figure shown in Pl. LVI, Fig. 3, is characteristically similar to the one found in the *Ā'in*.[36] The *chhatra* of Akbar was of a simple shape but far more profusely decorated with gems and precious metals all over.[37] It has a circular rim with or without any appendage. The top surface is oval or circular or domed. The dome is decorated with embroidered work and surmounted by two or three spheres of varying sizes, and a pinnacle.

The Sāyabān

The *sāyabān* (Pl. LVI, Figs. 10-15) was also intended to provide shade and hence was also called *āftābgīr*. It had a pole, three to four metres long, on the top of which was mounted a large leaf-shaped fan, about a metre in length.[38] The shape of the fan could vary. It could be oval, spherical or conical. It was bedecked like the *chhatra* with numerous jewels.[39] The *chhatra* however, was more favoured and considered fashionable.

The Kawkaba

The *kawkaba* (Pl. LVI, Figs. 16—18) is a decorative form of the Arabic word *kawkab*, meaning a star. Abu'l Faẓl does not give sufficient description of this ensign, but only says that it used to be placed outside the assembly hall.[40] The lexicographers describe it as a polished ball, probably of metal, intended to announce the presence of the king at State business.[41] Jahāngīr has referred to the *kawkaba* as a kind of firework which was lighted.[42] It seems to have been an indispensable part of the royal para-

[32]*Tā'rīkh*, f. 136 (Patna); *Razm*, pl. 73 (Jaipur).

[33]*Akb*, pls. 63, 65 (VA); *Razm*, pls. 6, 42, 83, 96, 126 (Jaipur); *Anwār*, f. 32 (Varanasi); *Tā'rīkh*, ff. 54, 55, 57, 59, 67, 108, 147, 154, 170, 226, 227, 230, 253, 337 (Patna); *Bāb*, pls. 2, 4, 8, 9, 15, 17, 20, 31 (Moscow), ff. 52, 94, 273, 274, 306, 468 (BM).

[34]*Tā'rīkh*, f. 136 (Patna).

[35]*Encylopaedia af World Art*, IV, p. 719.

[36]Blochmann, *op. cit.*, I, pl. IX, fig. 5.

[37]*Ibid.*, p. 52.

[38]*Ibid.*

[39]*Ibid.*

[40]*Ibid.*

[41]Steingass, *s.v. kawkaba.*

[42]Rogers and Beveridge, *op. cit.*, I, p. 42.

phernalia—the insignia-holders carried it during the expeditions and on the battlefields. It was suspended from a metallic hanger with a curved stem ending in the motif of the head of a dragon, a bird or a snake (Pl. LVI, Figs. 19-20). There were stems meant to be fixed on the ground like a long lampost[43] and there were other kinds, shorter ones, permanently fixed to the wall like a long peg.[44] The ball was hung from the neck of the dragon. The paintings show at least three types. In one of the illustrations, it appears like a solid ball with an inner core or a circle (Pl. LVI, Fig.16).[45] In another, it hangs just like an orb (Pl. LVI, Fig.18).[46] In the third one, it resembles a lotus bud, with distinct markings of the petals (Pl. LVI, Fig. 17).[47]

The *aurang*, *chhatra*, *sāyabān* and the *kawkab* were the ensigns which only the king had the privilege to use.[48] Abu'l Faẓl's report on these seems to imply that the other insignia, such as the *'alams* (*chatrtoq* or *tumantoq*), and the flags could be bestowed on the princes and nobles. We come across several instances of the conferment of these ensigns. An account in the Emperor Jahāngīr's memoirs shows that the *sāyabān* or *āftābgīr* could be bestowed on a prince as well, but that was very exceptional.[49]

The 'Alam

The *'alam* (Pl. LVII) is an Arabic word for the standard which may be of any kind, a flag or any other similar ensign. The *'alams* of the Mughals are distinctive from the Indian in their forms, though they vary from king to king. They were displayed on occasions of festivity or war, and seldom less than five at a time.[50] This is seen in the *Bāb* (BM),[51] where the heads of all the *'alams* are embellished with tridents. Special attendants were assigned the responsibility for carrying them.

With slight variations in the heads, the Akbari *'alams* are all the same. Akbar, with his fondness for innovation, got a variety of *'alams* made, giving them different names too.[52] A *chatrtoq* was smaller than others. It had a round wavy crest and four bunches of yaks' tails instead of one. The *tumantoq* was similar but for the tail. What was properly called an *'alam*

[43]*Tā'rīkh*, f. 46 (Patna); *Akb*, pl. 65 (VA); *Bāb*, ff. 94, 273, 294, 306 (BM).

[44]*Bāb*, f. 294 (BM).

[45]*Ibid.*, f. 306.

[46]*Akb*, pl. 65 (VA); *Tā'rīkh*, f. 46 (Patna); *Bāb*, ff. 94, 273 (BM).

[47]*Bāb*, f. 294 (BM).

[48]Blochmann, *op. cit.*, I, p. 52.

[49]Rogers and Beveridge, *op. cit.*, I, p. 74.

[50]"When the king rides out, no less than five of these are carried along with the *Qūr*, wrapped up in a scarlet cloth bags." Blochmann, *op. cit.*, I, p. 52.

[51]*Bāb*, f. 128 (BM); a loose folio from *Bāb*, published in the *Larousse Encyclopaedia of Modern History* (1817), facing p. 112.

[52]Blochmann, *op. cit.*, I, p. 52, pl. IX, figs. 4, 6.

had a tail-head resembling a flask with a long, cylindrical neck and a trifolioted crest on the top of it.

The *'alams* displayed in the illustrations are generally flat or two-dimensional, with only a suggestion of relief. The distinctions made by Abu'l Faẓl in the *Ā'in*, are not strictly followed by the painters. *'Alams* depicted are similar in their decor and embellishment, with variations of their heads. A thick lock of the yak tail was sometimes, but not necessarily attached below the emblem. Costly cloth of deep, rich shades—green, purple, orange, red, blue, embellished with floral motifs—was wrapped around the poles though a few were left bare.

The emblems were designed in the traditional form of floral motifs, stylized human or animal heads or a dragon or forms of utensils similar to the *mīnās* with two spouts. The conical, round or oval head, with foliated edges, was mounted with an orb or a pinnacle or a trifoliated crest on the top. A spear-head, with one or three prongs, shaped like a trident, were attached, as an emblem, to the top of an *'alam*. Their forms as a matter of rule, were symmetrical. The head of an elephant, embellished with a crown (the symbol of Ganesh, the Hindu god) and trident—an emblem of ancient India—seems to have been adopted by the Mughals.

'Alams ending in gold disks, orbs, heads of dragons, etc., are probably of Central Asian origin.[54] The human face,[55] possibly representing the sun and used as an emblem, is of Persian tradition. An inscription of "*Allāh*," often been on the surface of the head of an *'alam*, is common in the Islamic world.[56] The great variety introduced in the heads of *'alams* by employing varying forms of utensils, especially the *mīnā*, seems to have been the innovation of the Mughals.

The Flag

Akbar's flag (jhandā) was very simple. Generally, it was made of a long triangular piece of cloth, not very broad. Flags made of broad cloth were trifoliated and short. As a matter of fact, no emblem appears on them. The emblem of a shining sun was extremely rare.[57] It is similar to that displayed in Pl. 9, Fig. 1, *Ā'in*, (Blochmann, I). Abu'l Faẓl has mentioned that the *shams* (pictures of the sun) affixed to the gates or to the walls of the palaces were illuminiated in the night.[58] The stem of the flags ended in a spear-head, or an orb, from which occasionally hung tufts of yaks' tails. The colour of cloth varied. It could be a pink, scarlet, crimson, blue, green, yellow or white. It seems—and this was so throughout the Mughal rule—that there was no special colour for the flag. Certainly,

[53]*Ibid*.
[54]*Encylopaedia of World Art*, IV, pp. 719-20.
[55]*Akb*, f. 236 (CB).
[56]*Akb*, f. 187 (CB), pl. 12 (VA); *Tā'rīkh*, ff. 24, 48, 238 (Patna).
[57]*Akb*, f. 188 (CB).
[58]Blochmann, *op. cit.*, I, p. 52, n. 2.

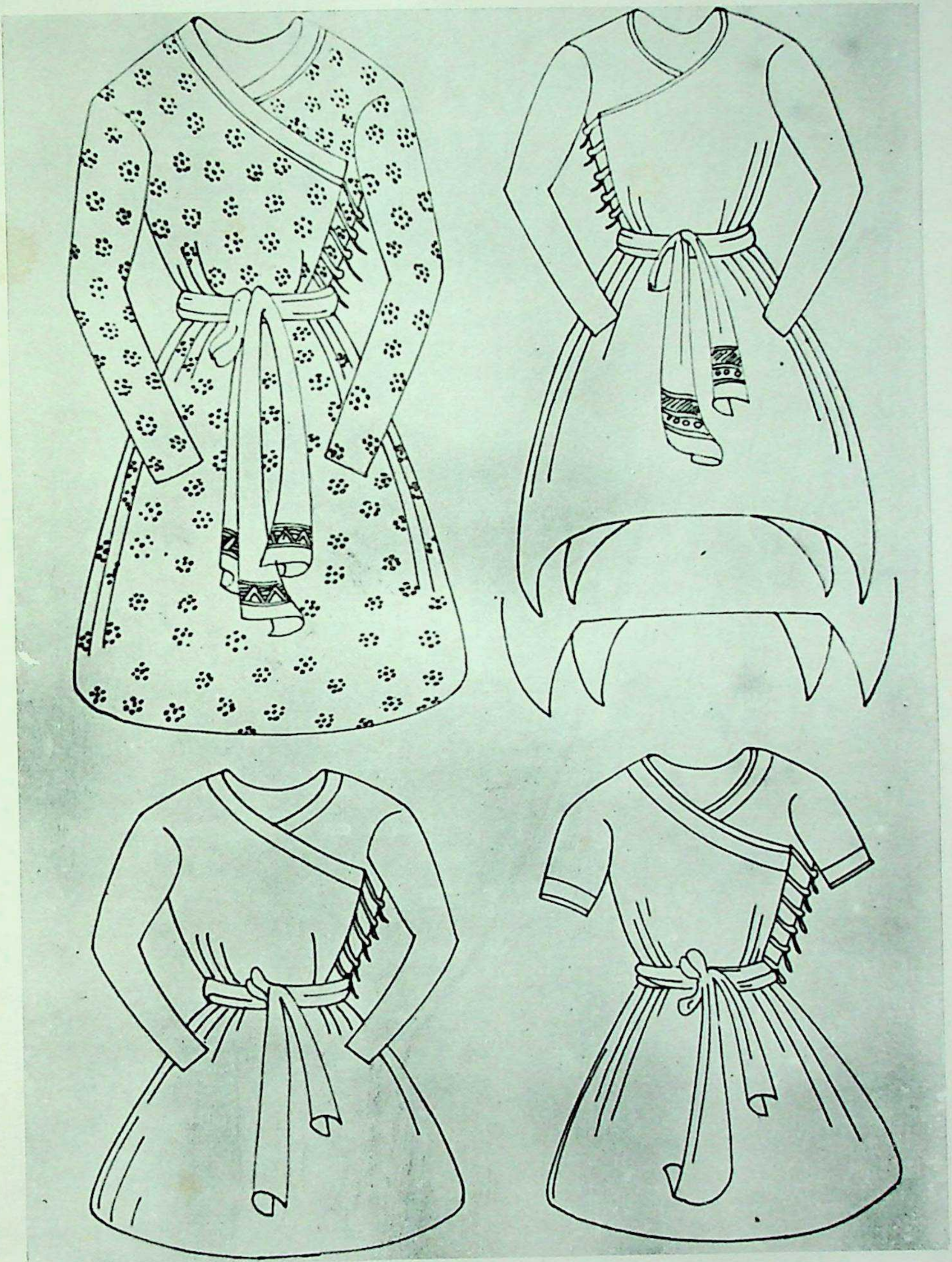
the variety in emblems and decorative shapes enriched the flags after Akbar's reign. Jahāngīr's flags were especially rich with emblems of the lion, the sun or a dragon etc.[59] They were made of broad cloth and were rectangular, consisting of three traingular ends stitched length-wise on the outer side. (Pl. LV, Figs. 25-28).

The Chaurī, or Chamarī[60] *(Fly-Whisk)*

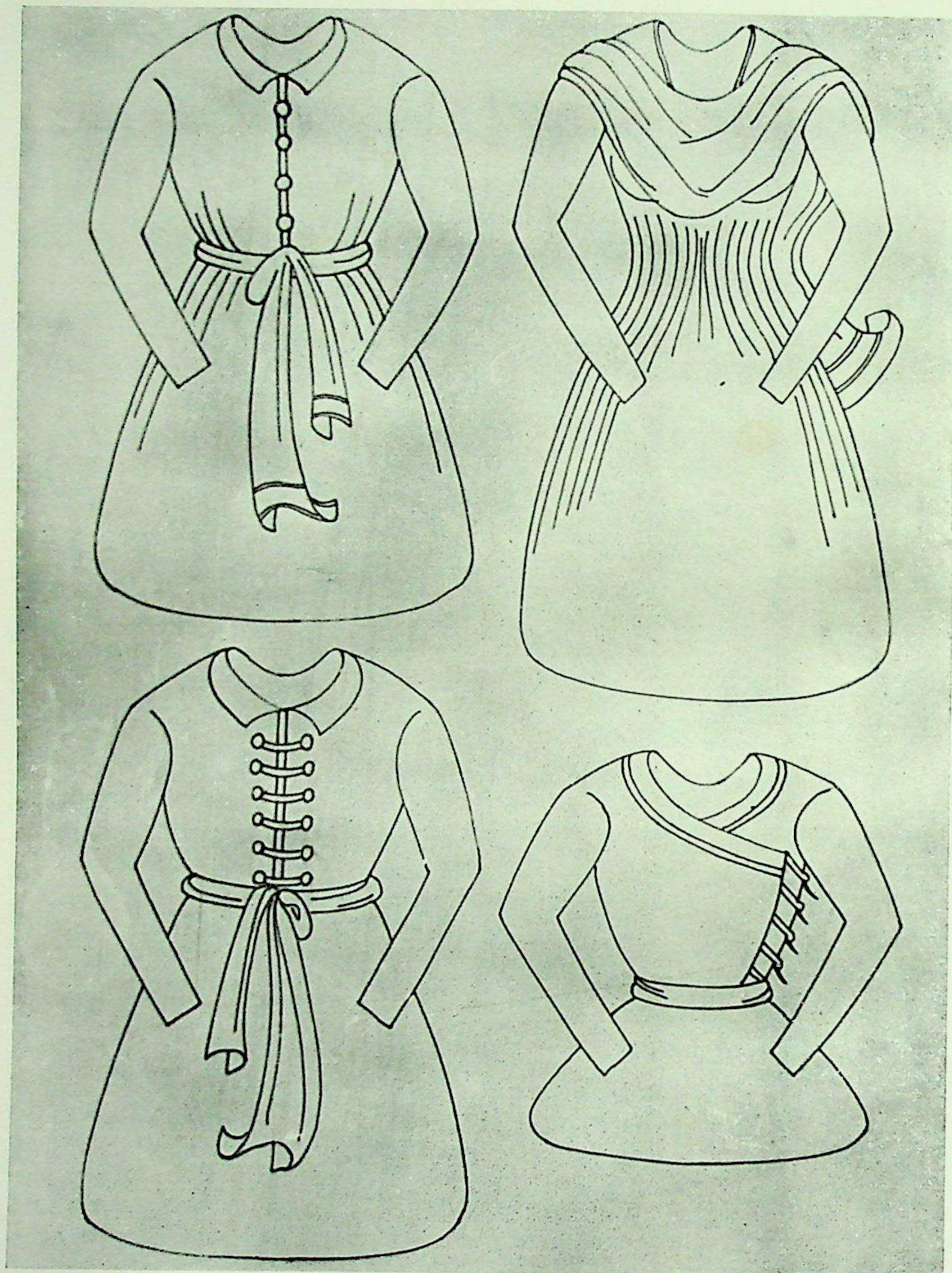
A typically oriental sign of dignity (and a privilege of princes and nobles) was the *chaurī*, literally the fly-whisk (Pl. LV, Fig. 29). Its handle was generally well decorated and the tufts of hair very thick. The attendant carrying the fly-whisk stood close to the king and waved it gently above the king's head. It was frequently used within and outside the palace. It was used by the ladies too, but towards the later phase, the *merchal*, made from peacock feathers, became more popular.

[59]See a painting by Manohar "Processional scene at the court of Jahāngīr" (*c.* 1605), Rampur.

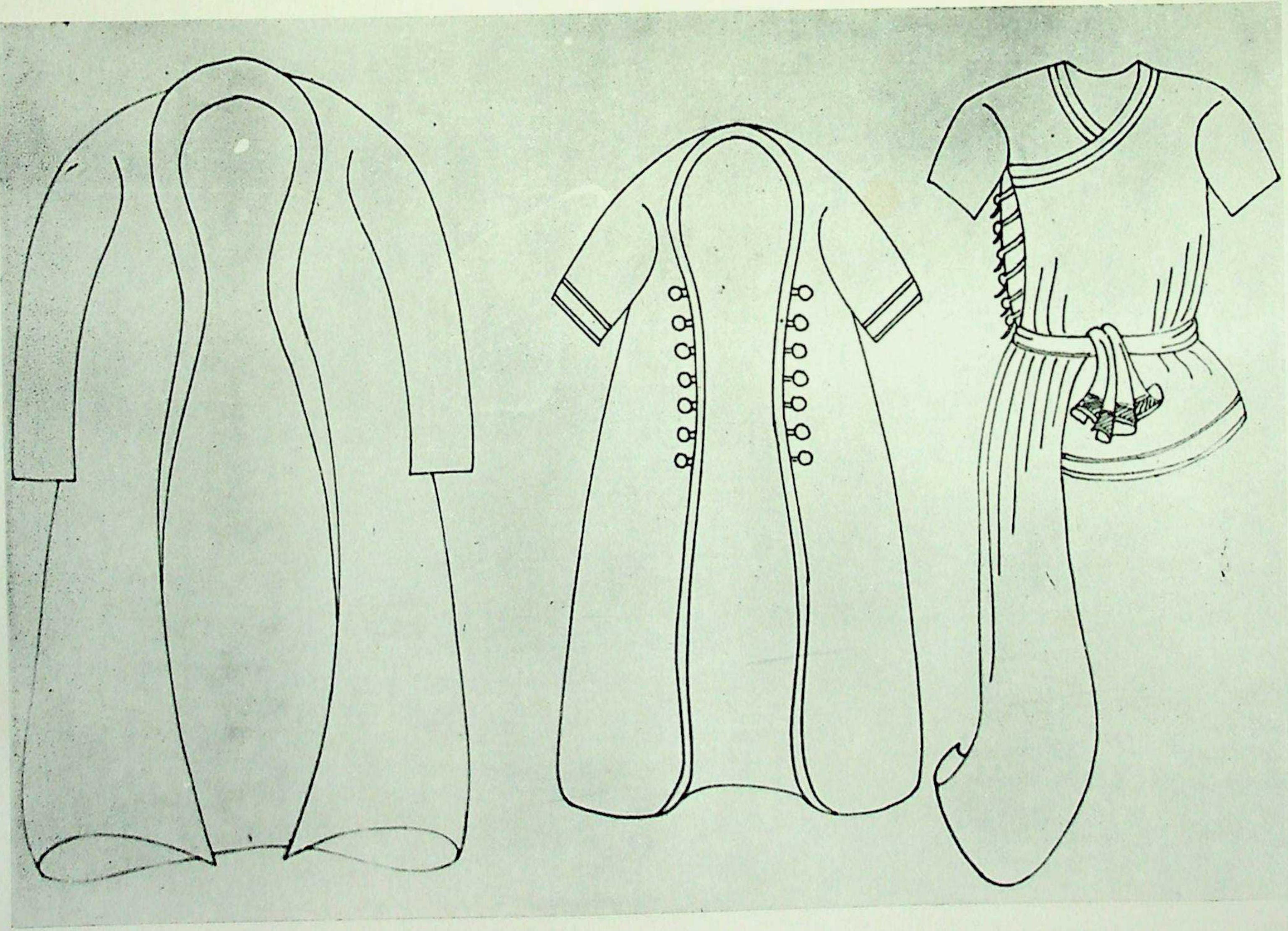
[60]*Encyclopaedia of World Art*, IV, p. 720.



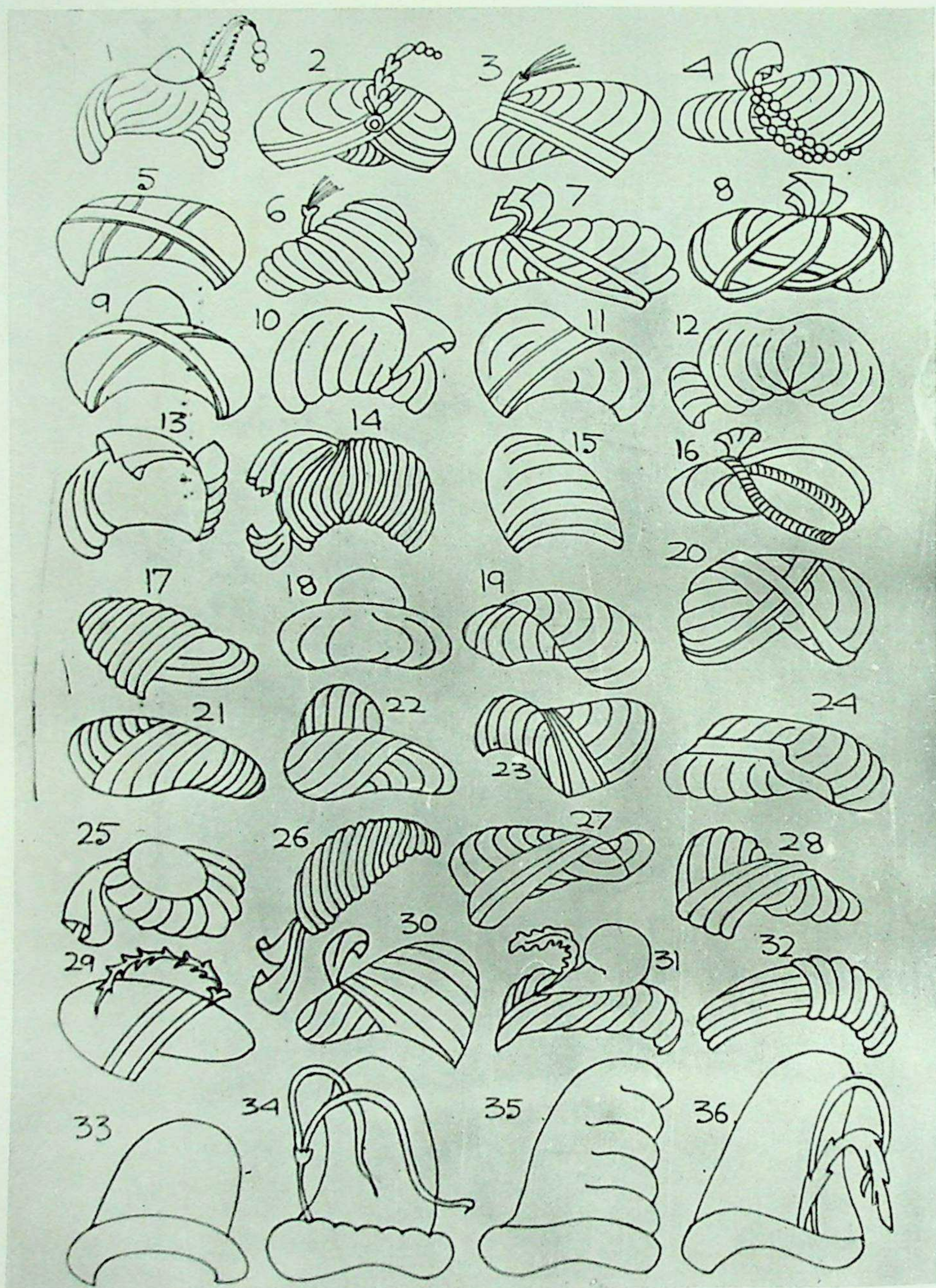
Pl. XXIX



Pl. XXX



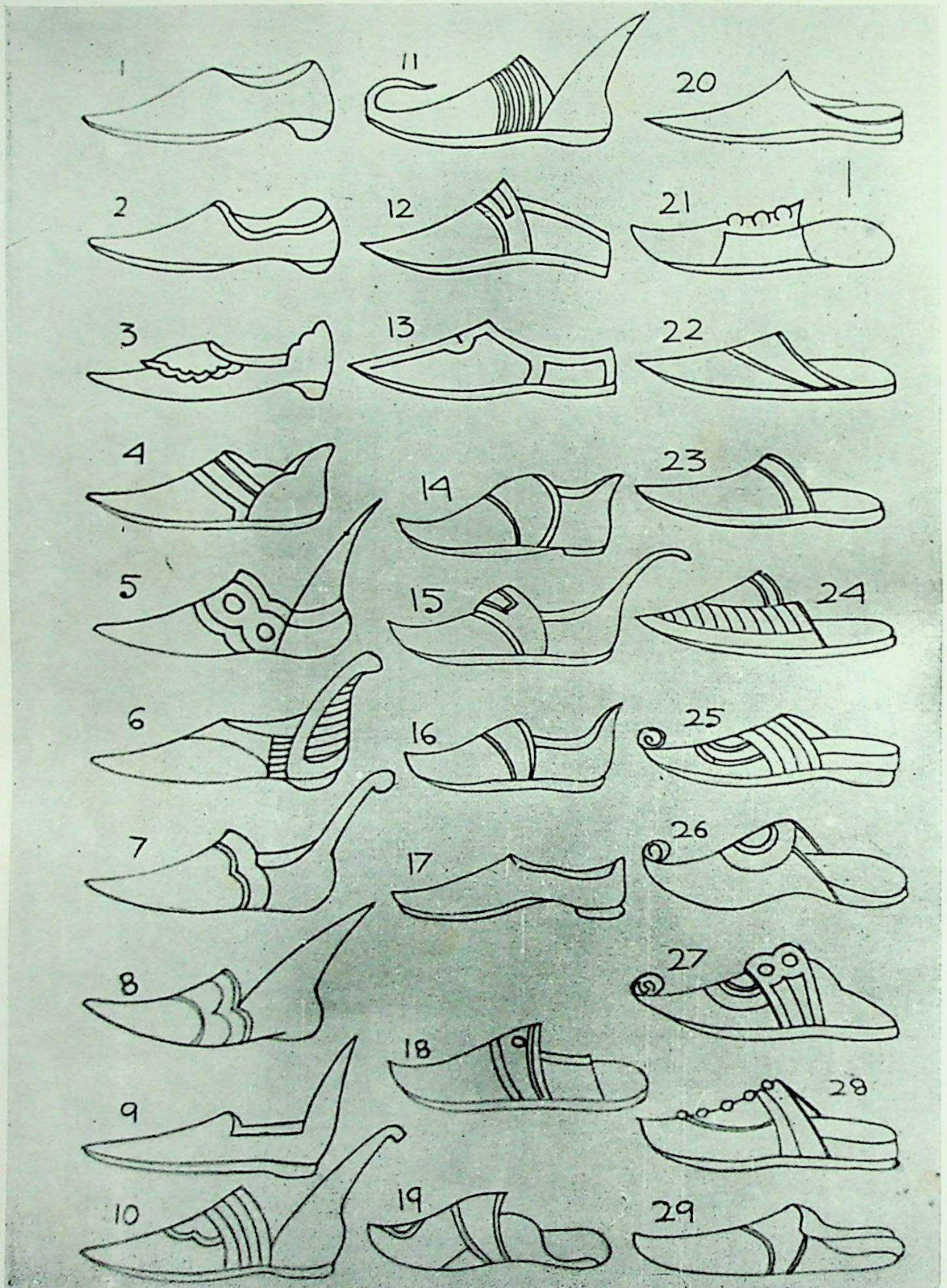
Pl. XXXI


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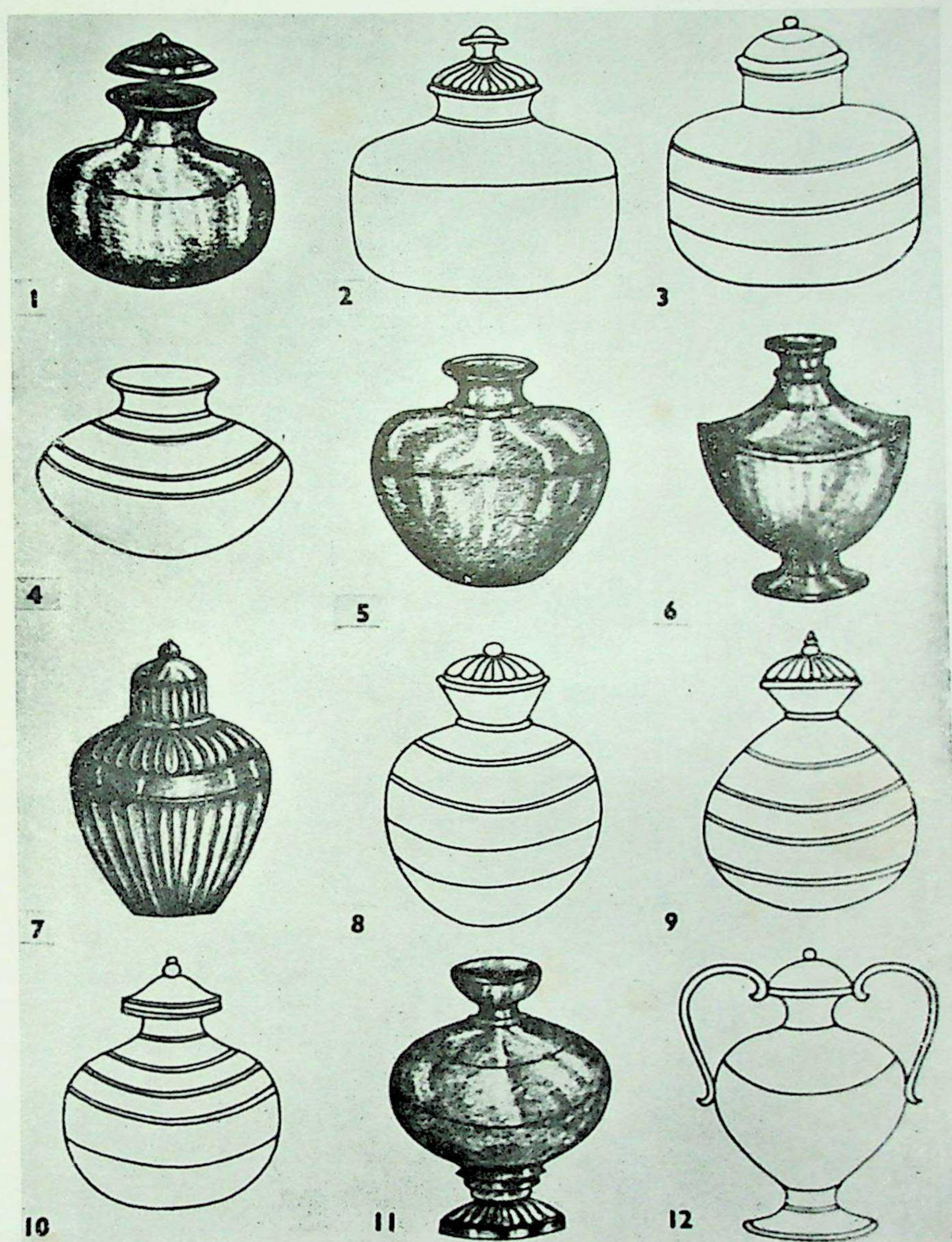
Pl. XXXII



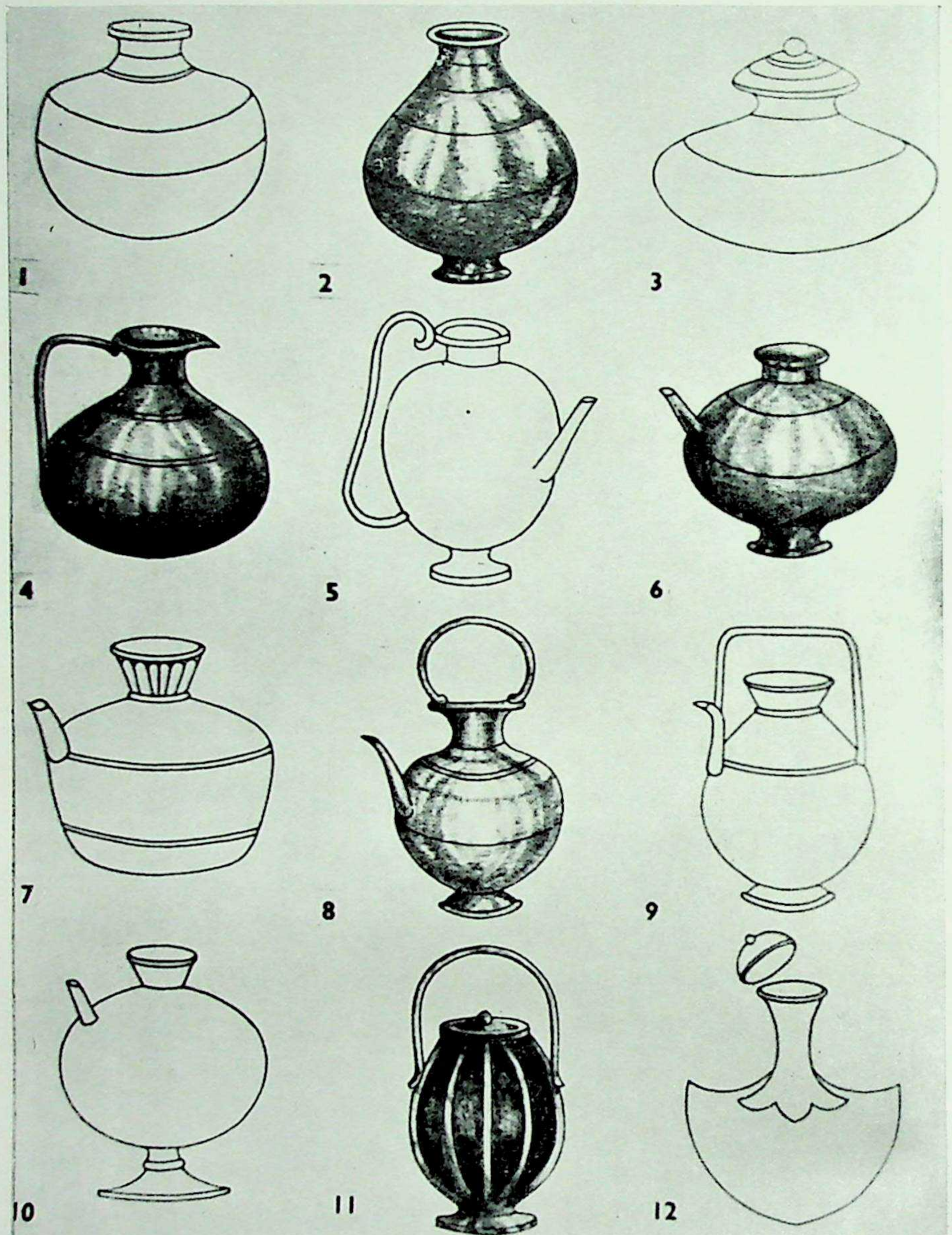
Pl. XXXIII



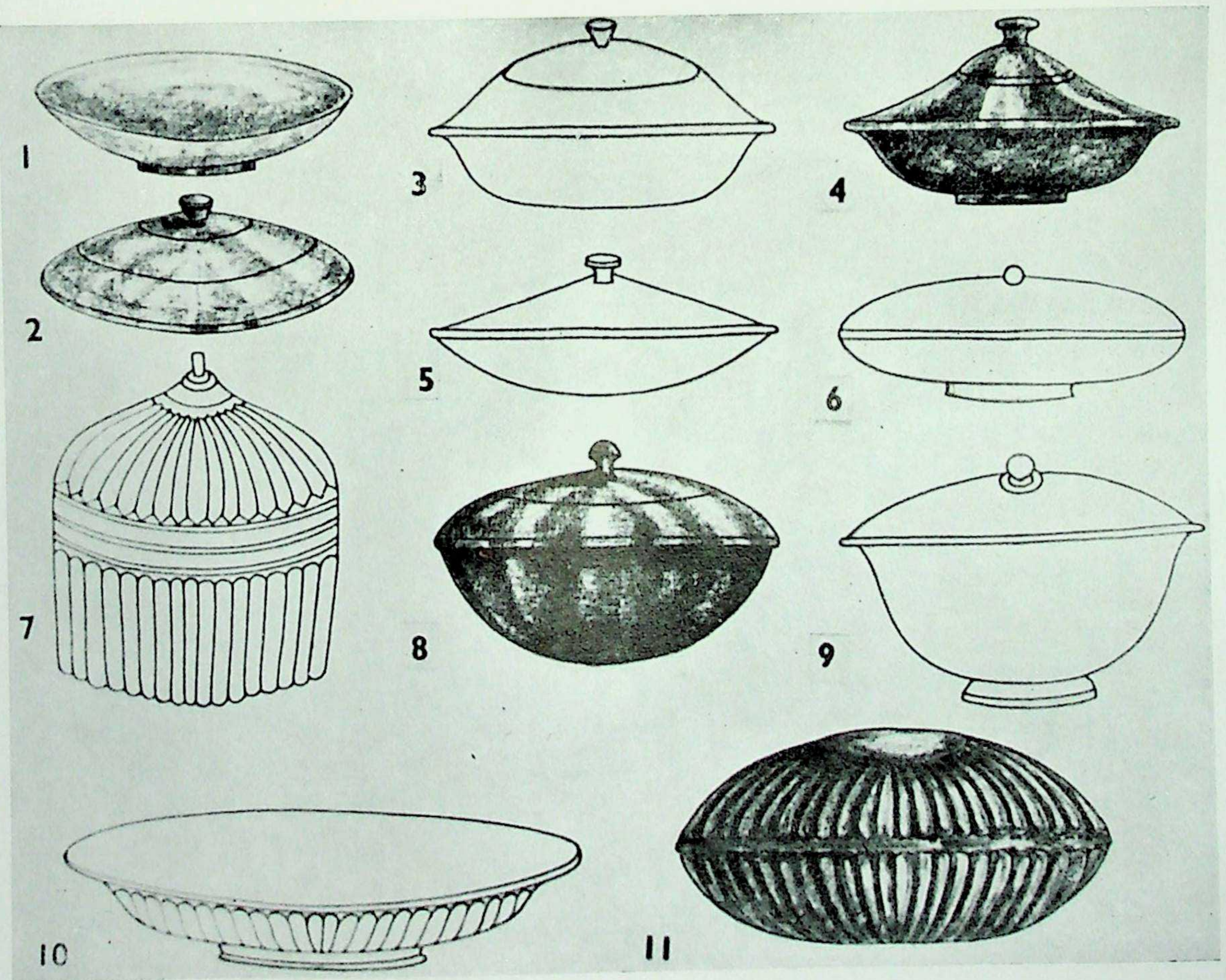
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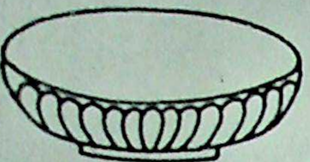
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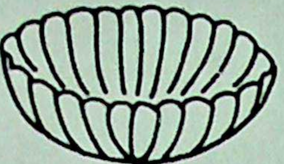


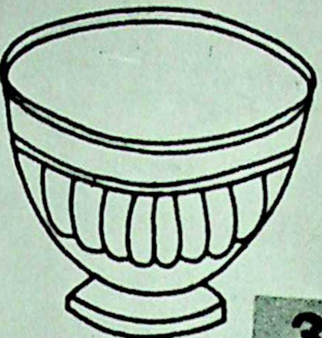
Pl. XXXVI



Pl. XXXVII



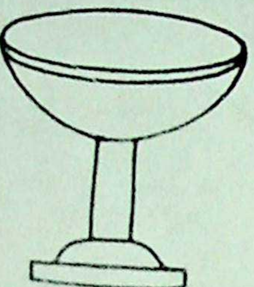




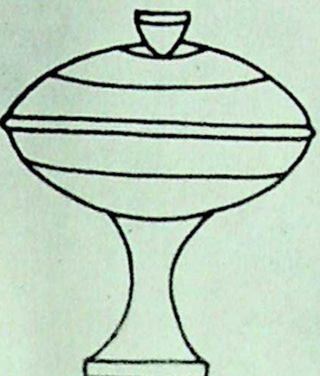


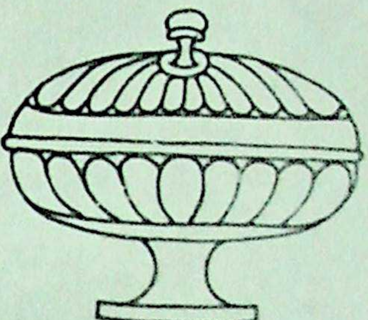




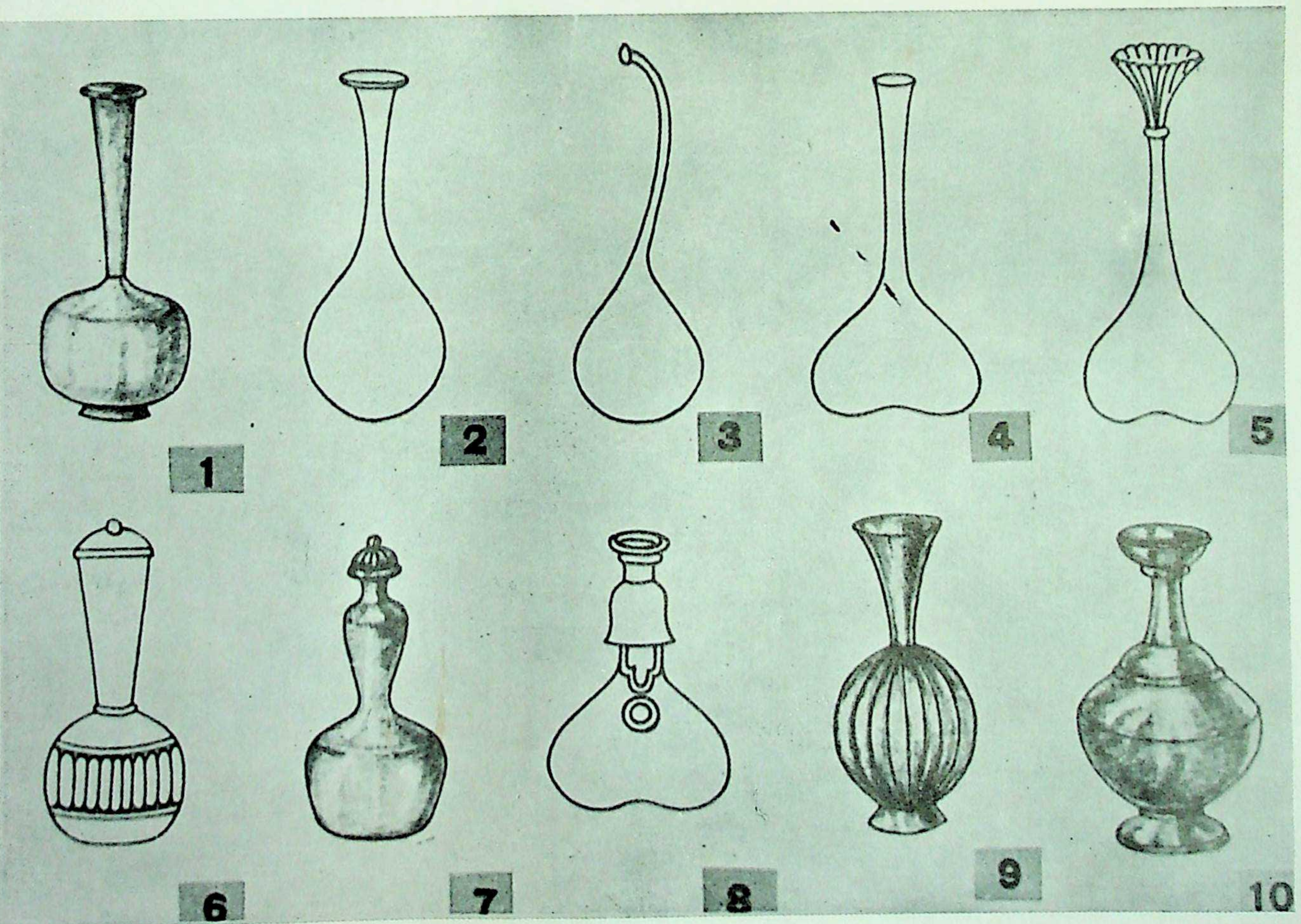




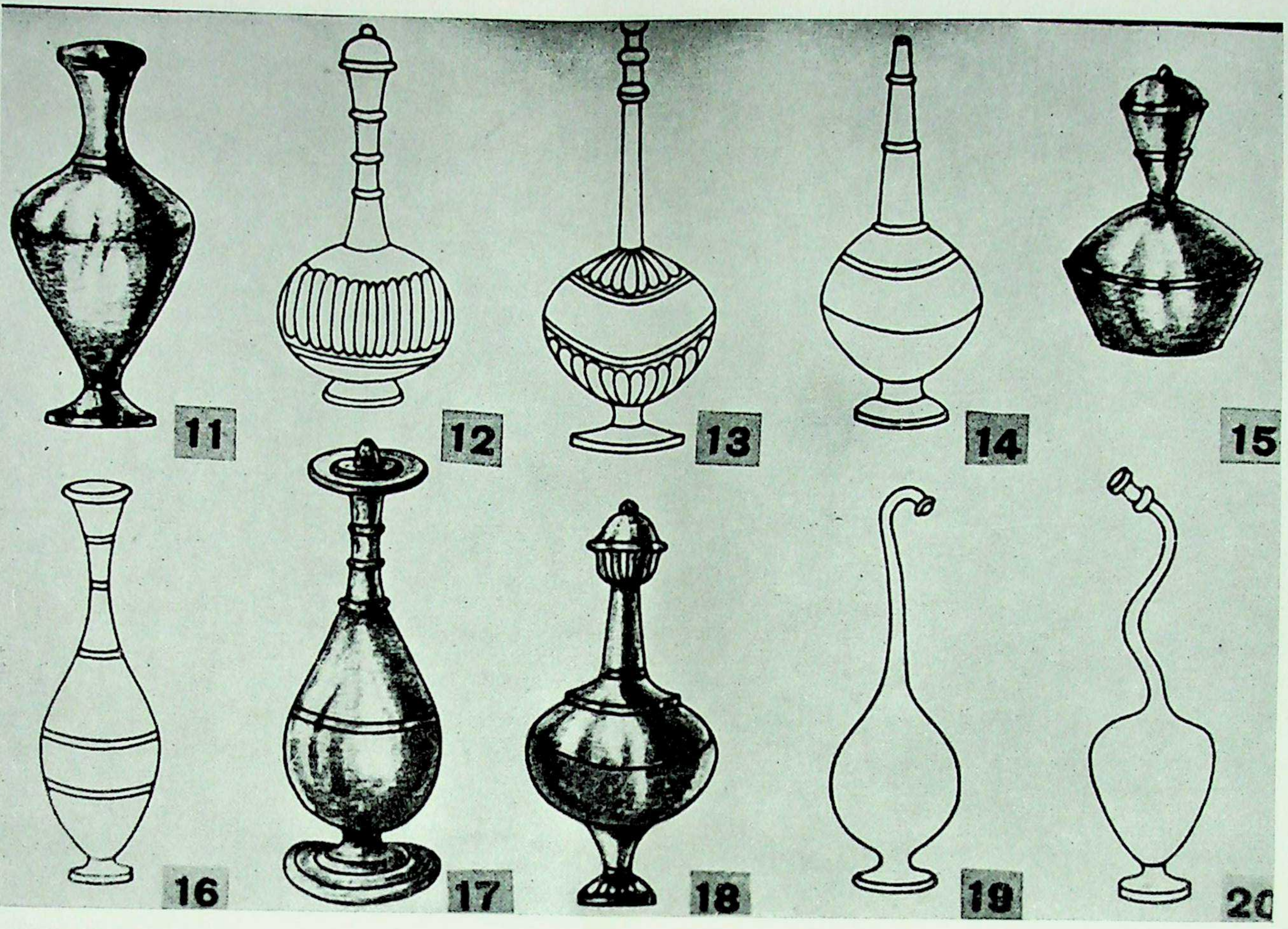




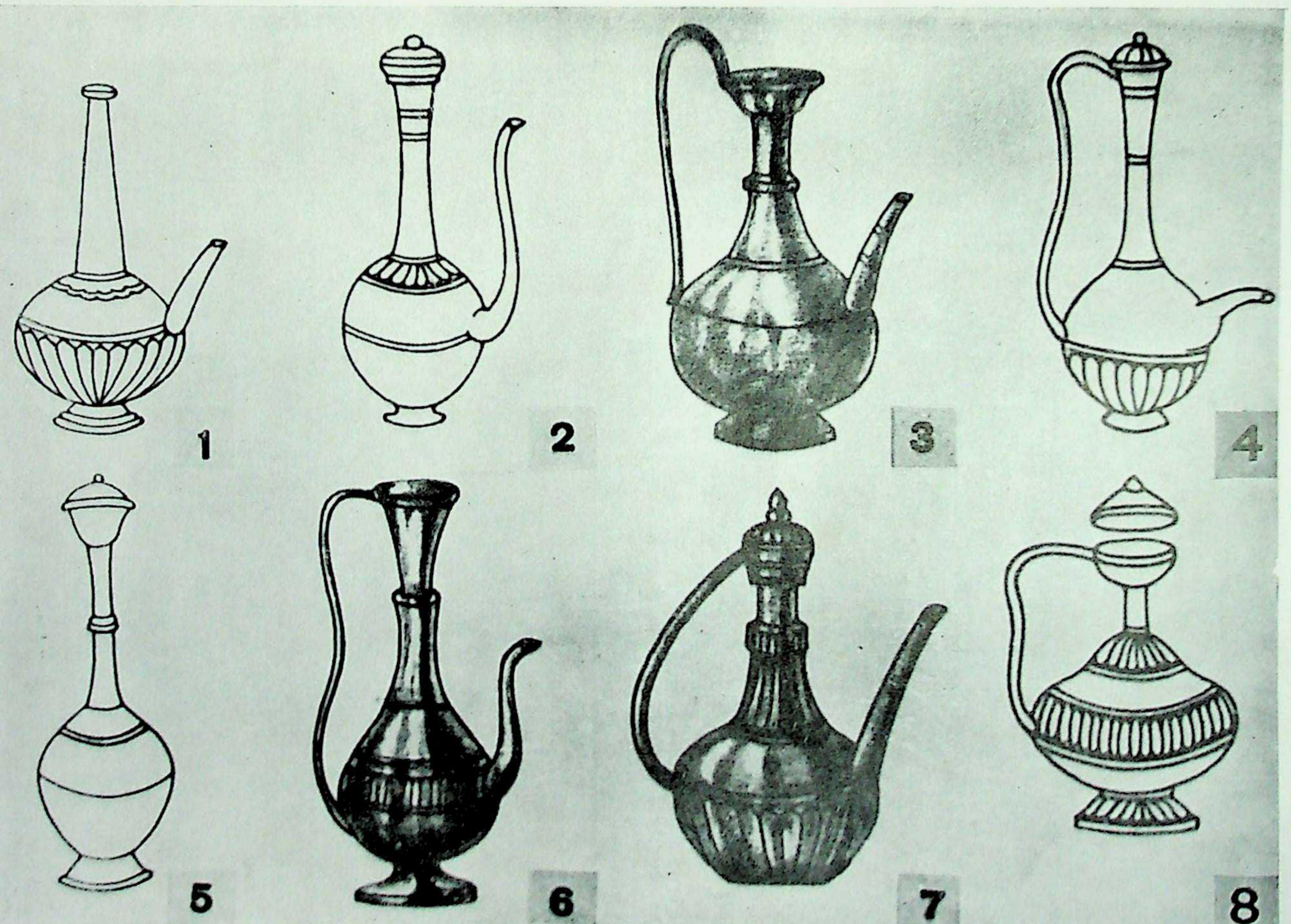
Pl. XXXVIII



Pl. XXXIX



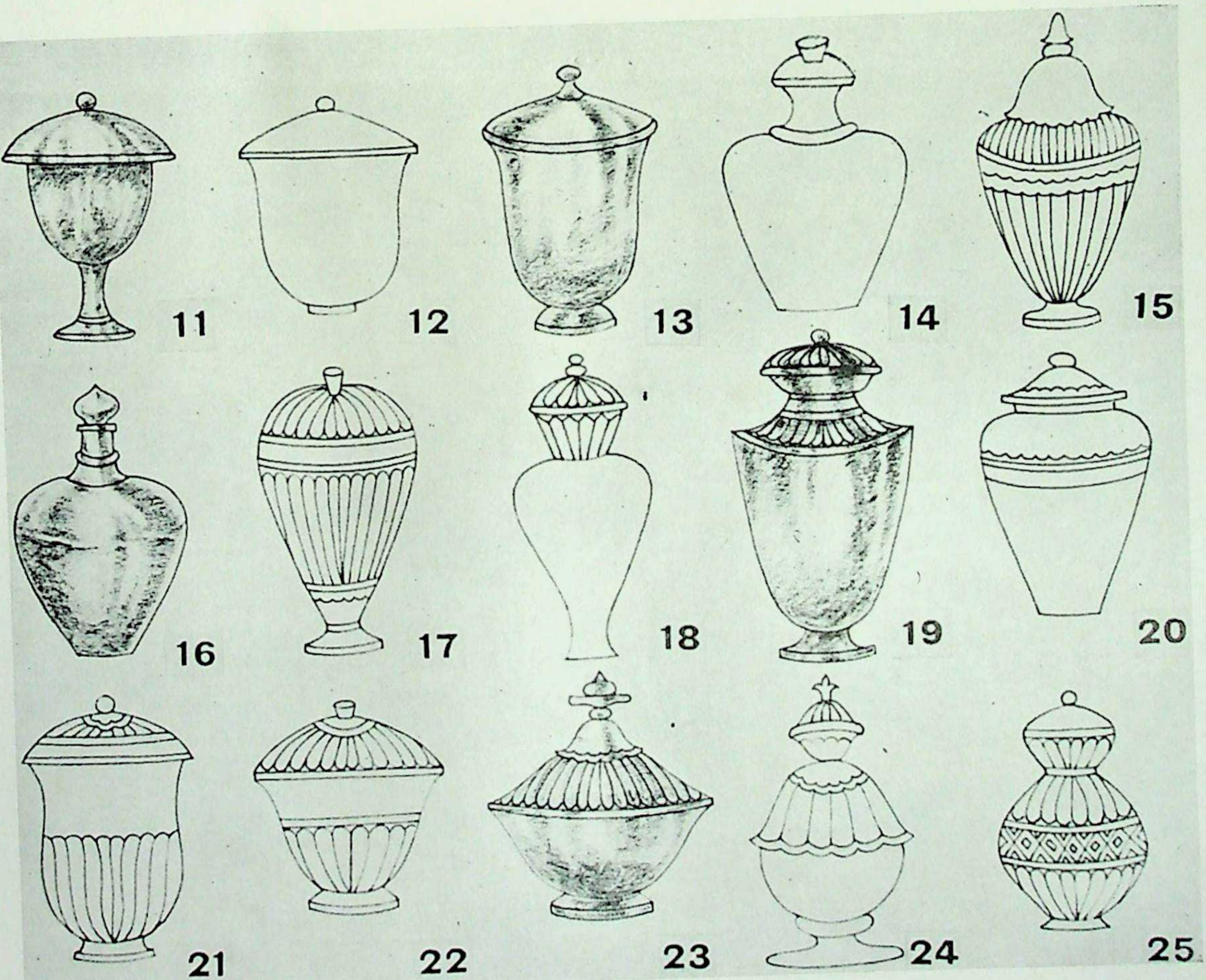
Pl. XL



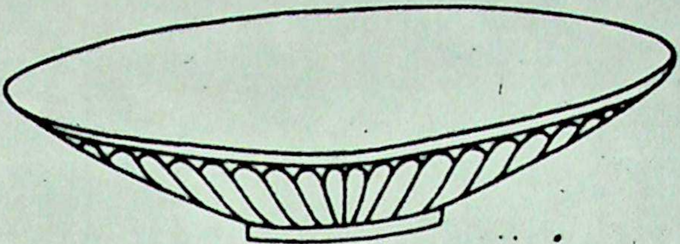
Pl. XLI

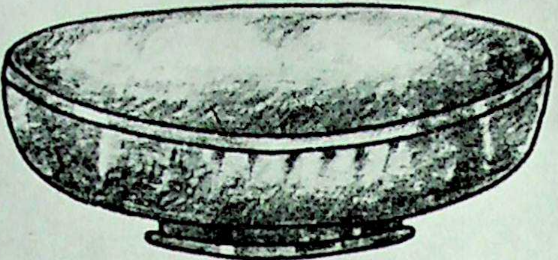


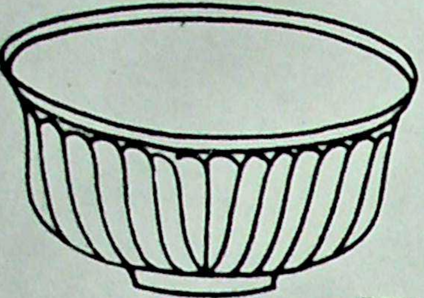
Pl. XLII

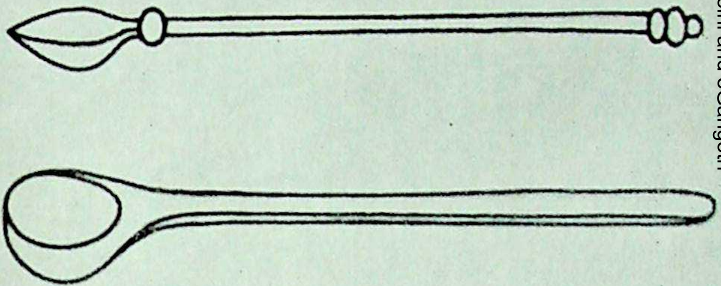


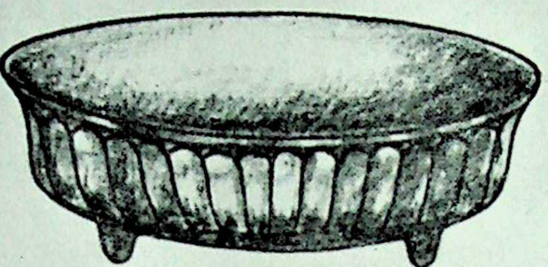
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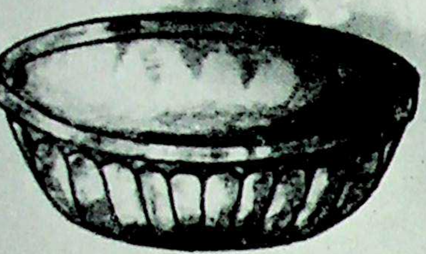

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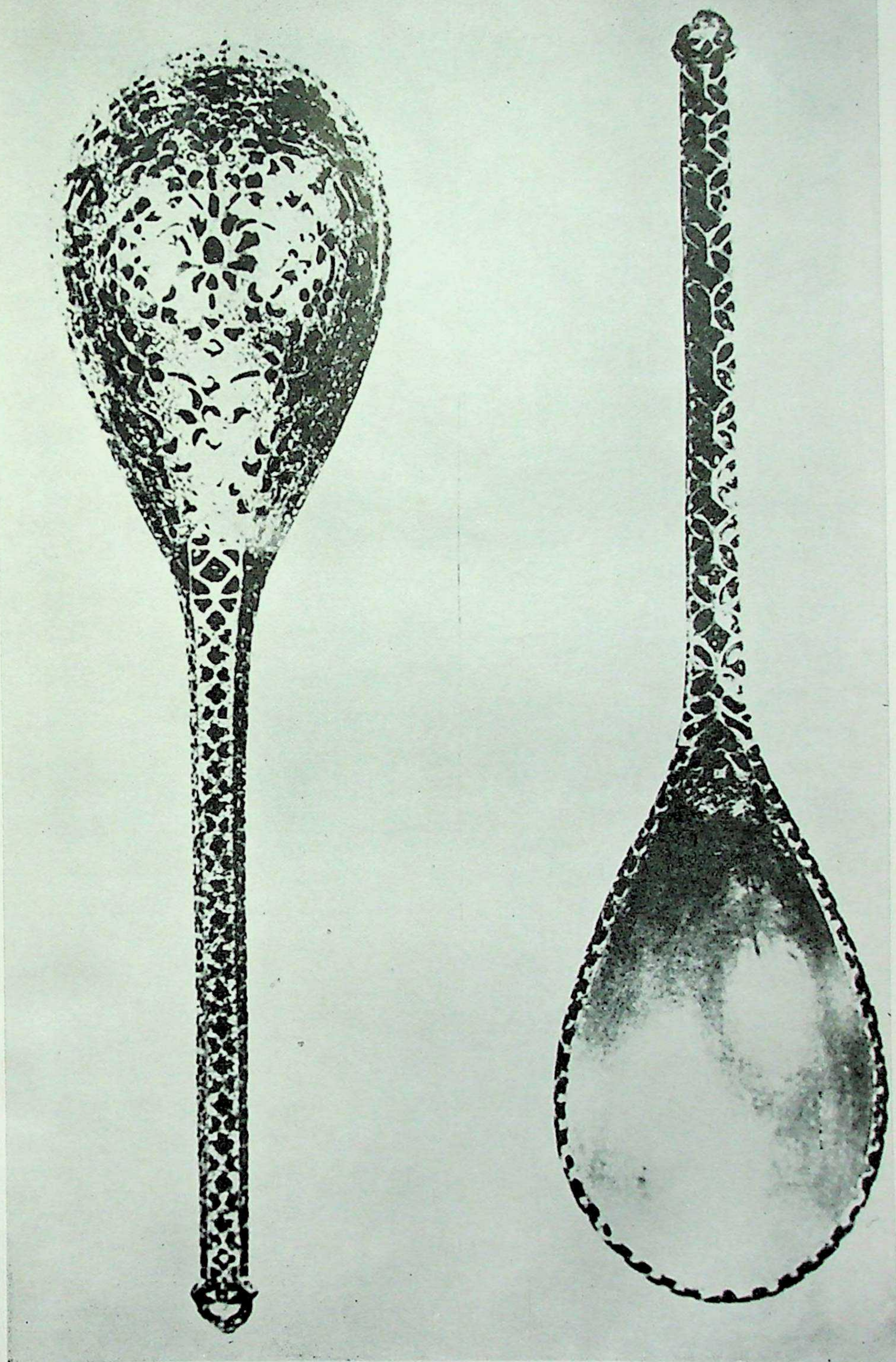

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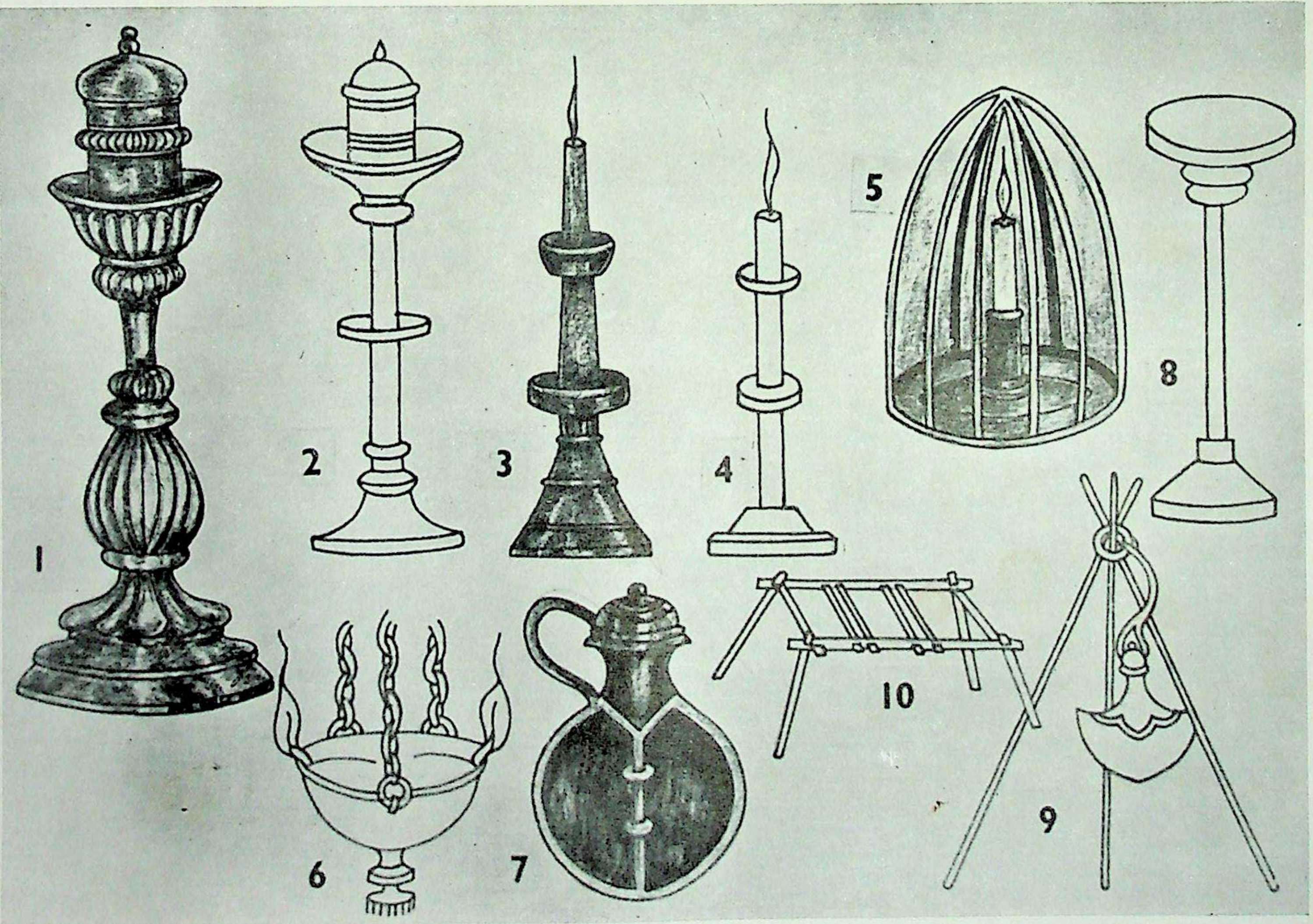
Pl. XLIV



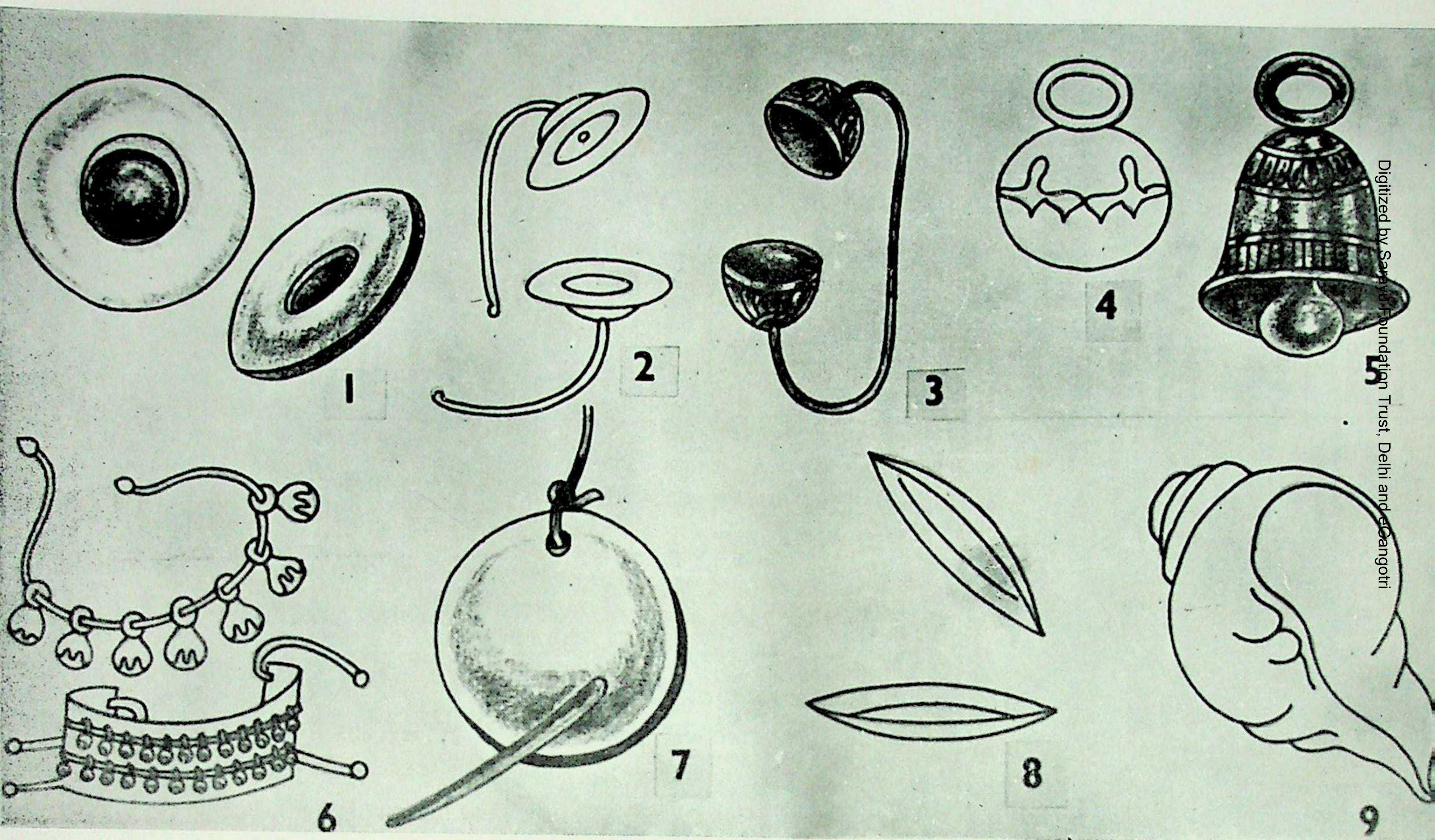
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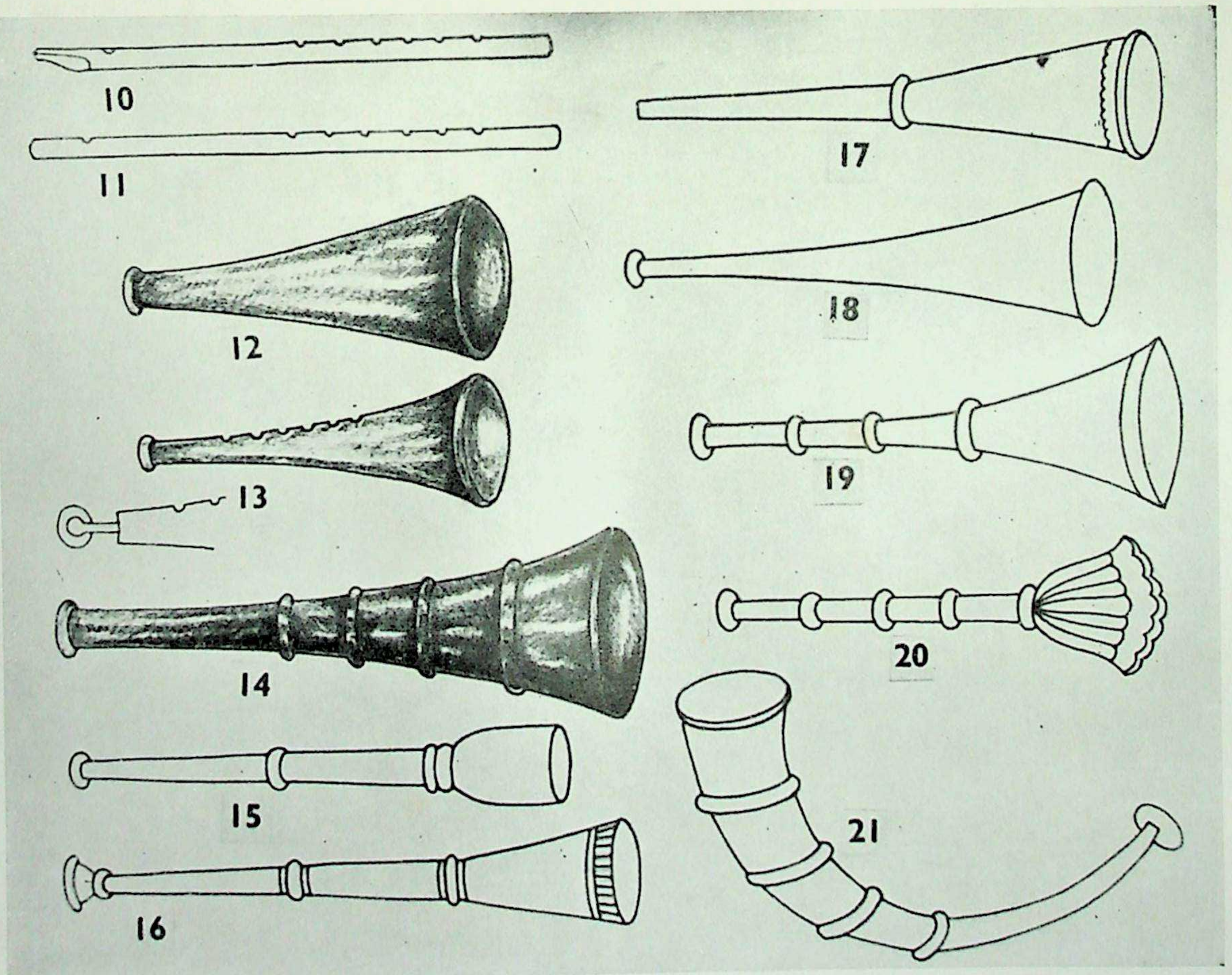
Pl. XLVI



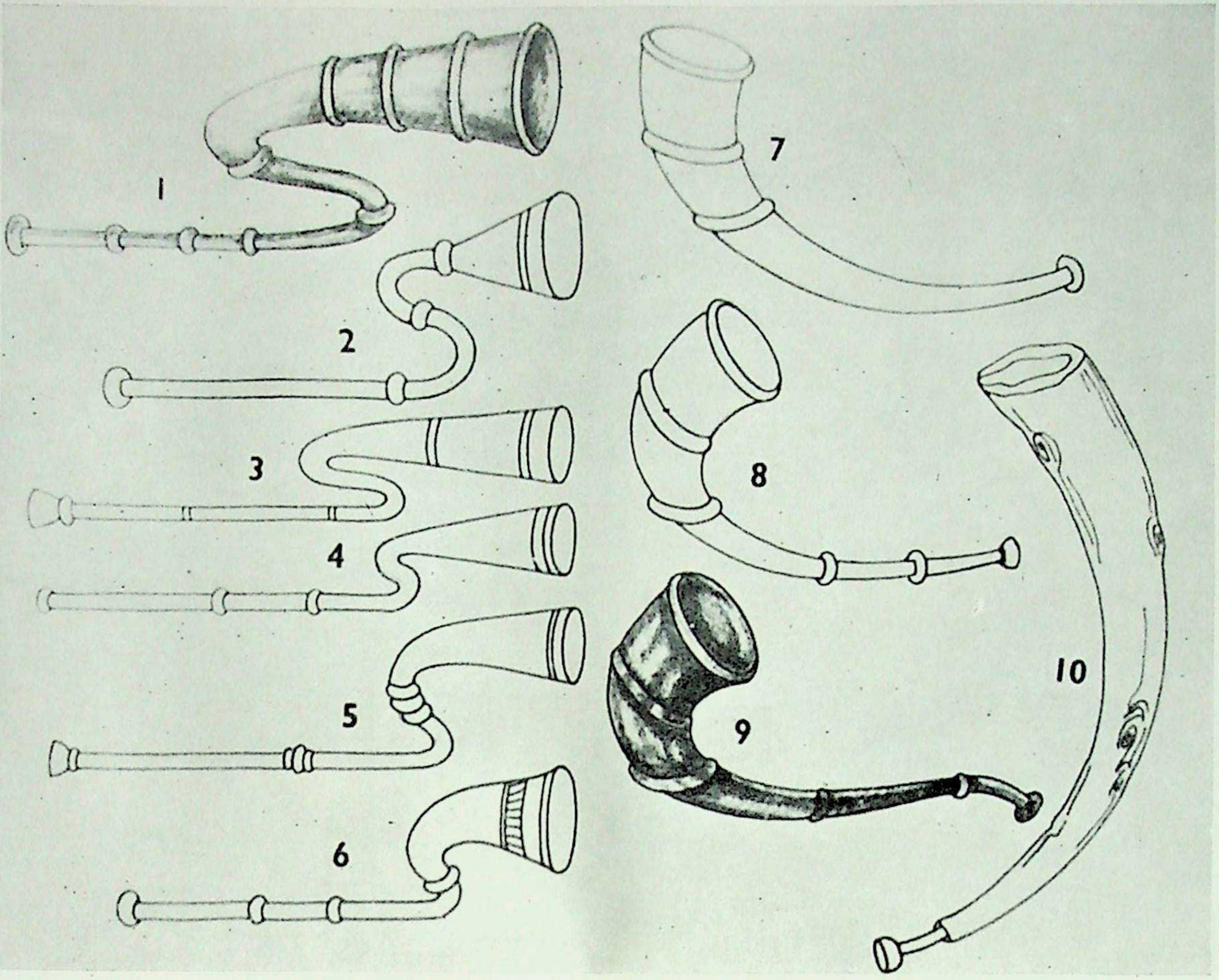
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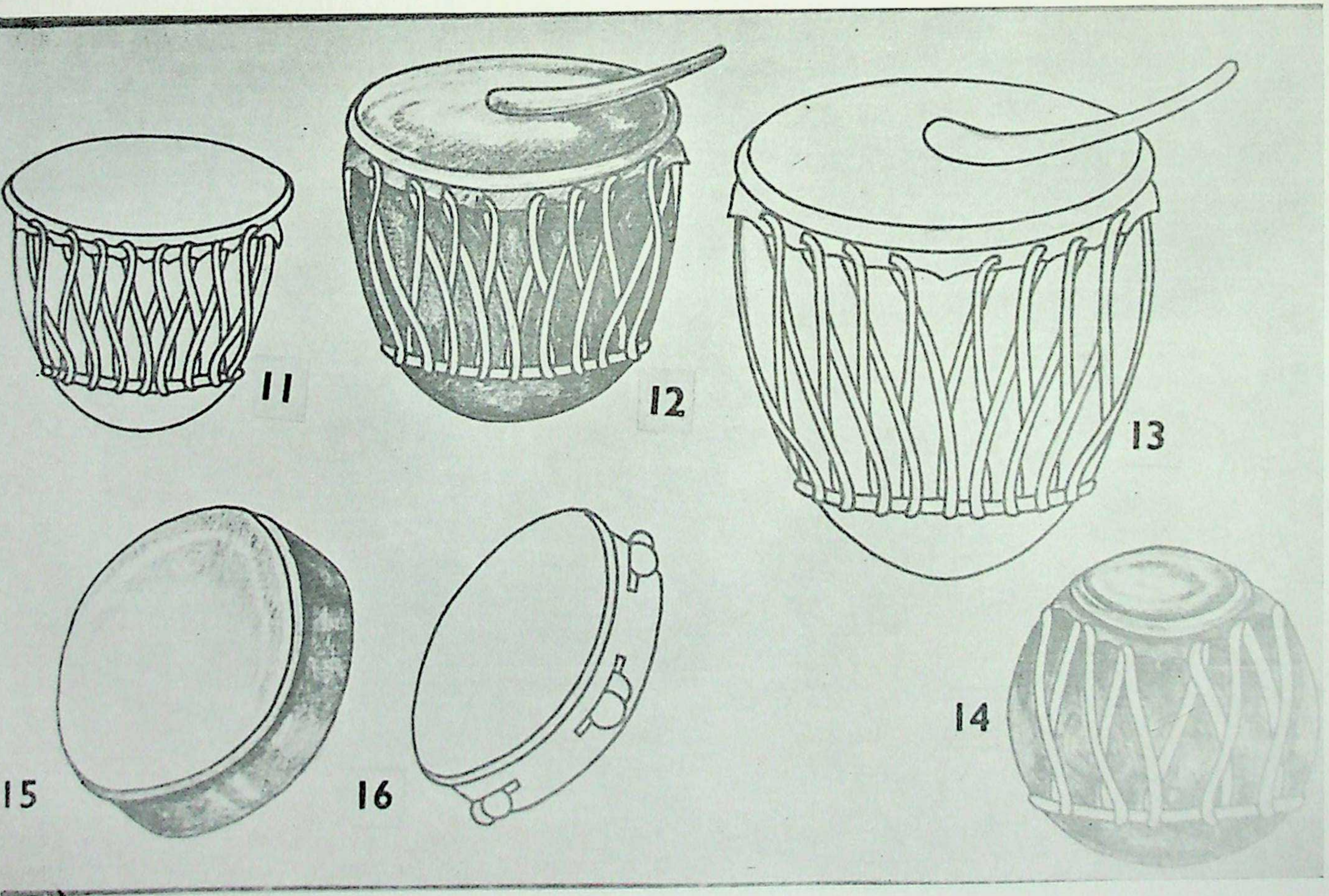
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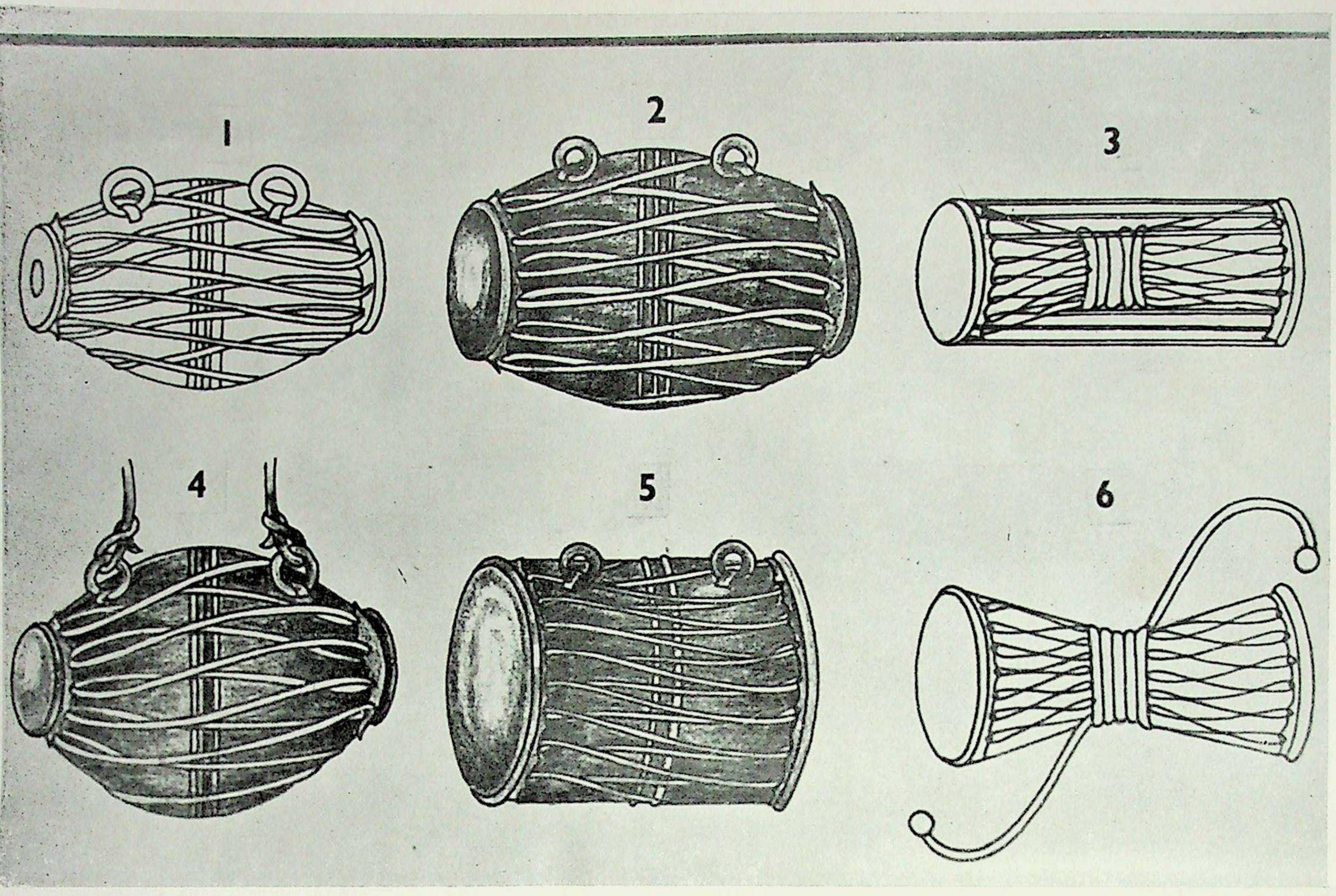
Pl. XLIX



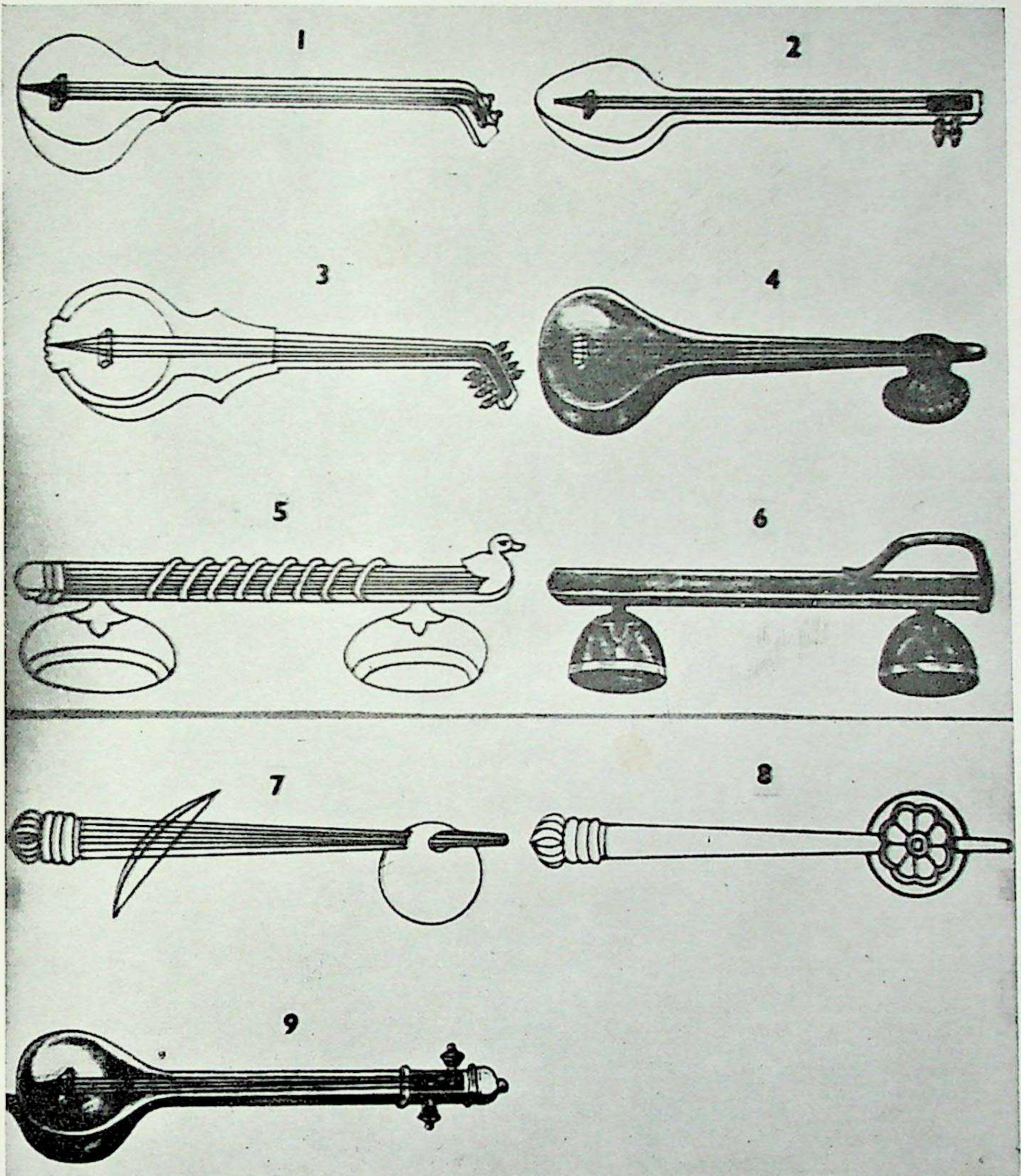
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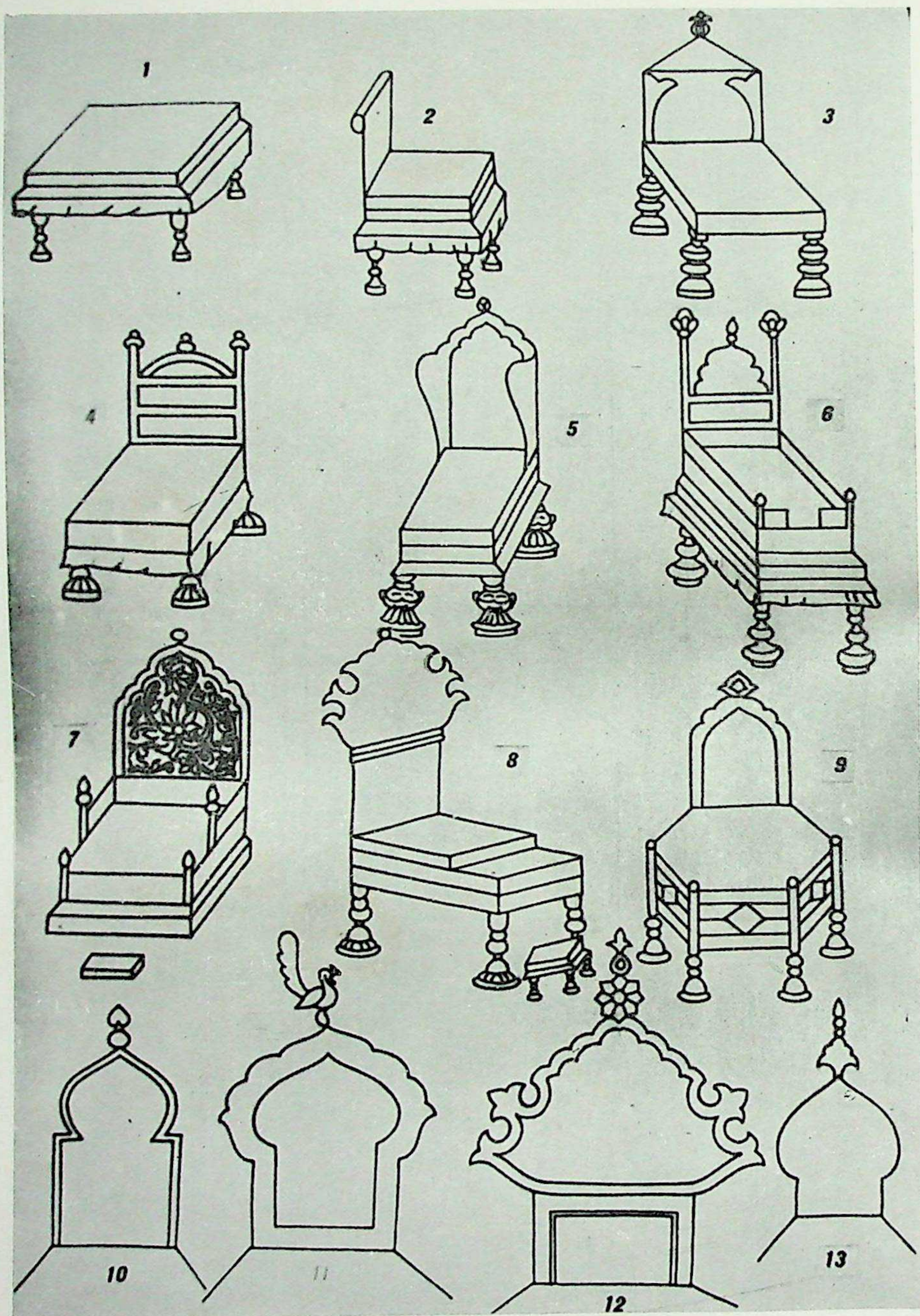
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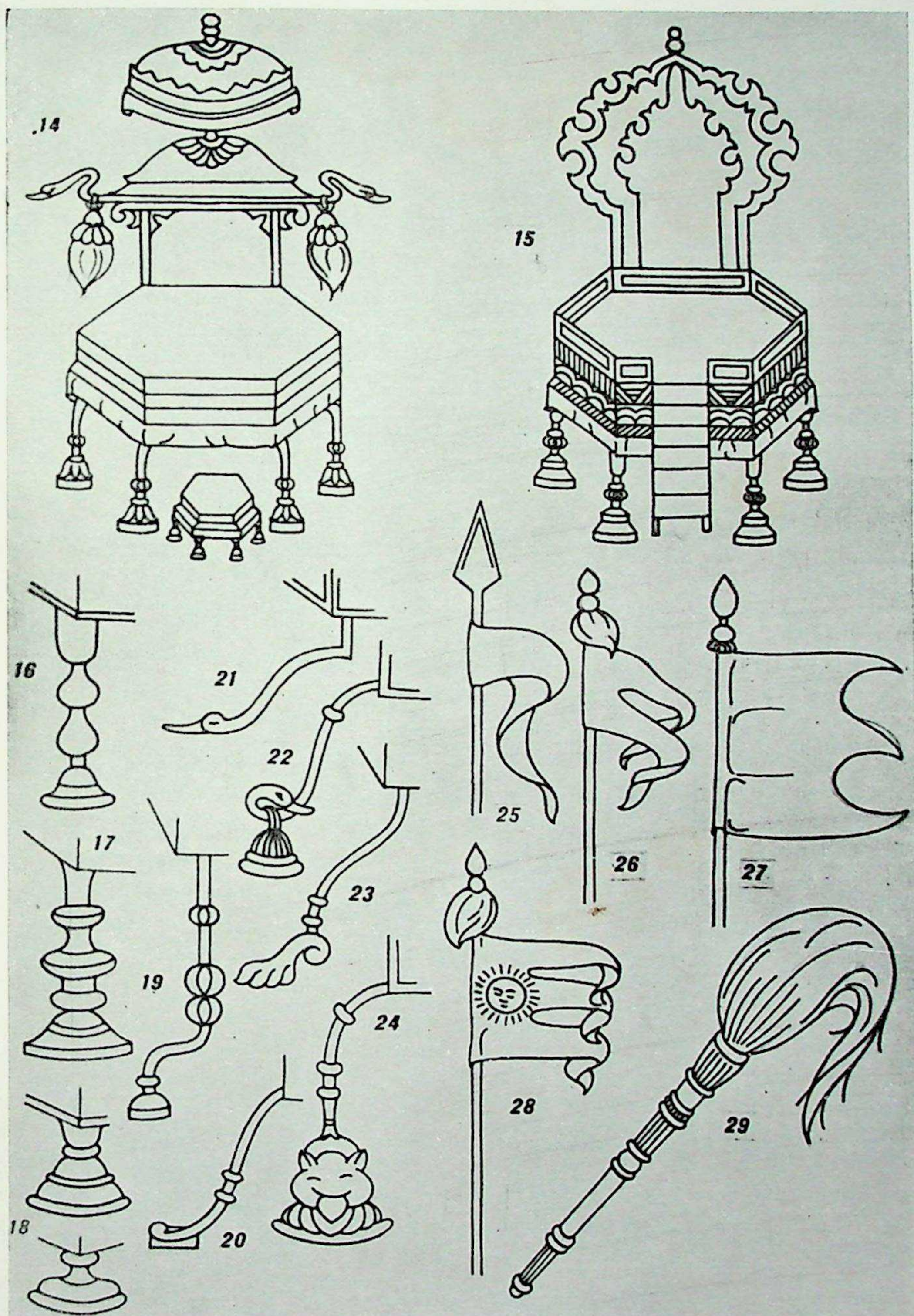
Pl. LII



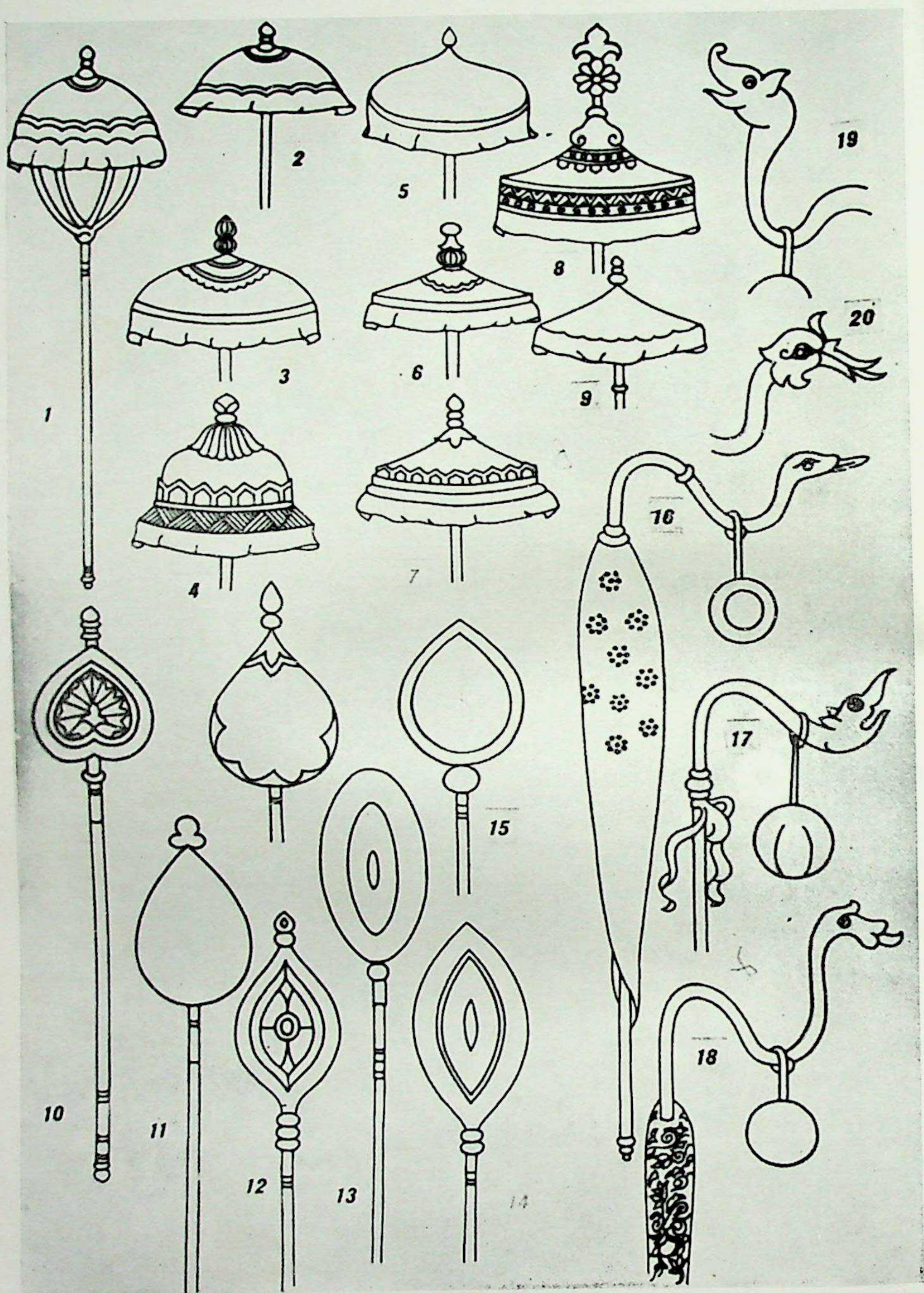
Pl. LIII



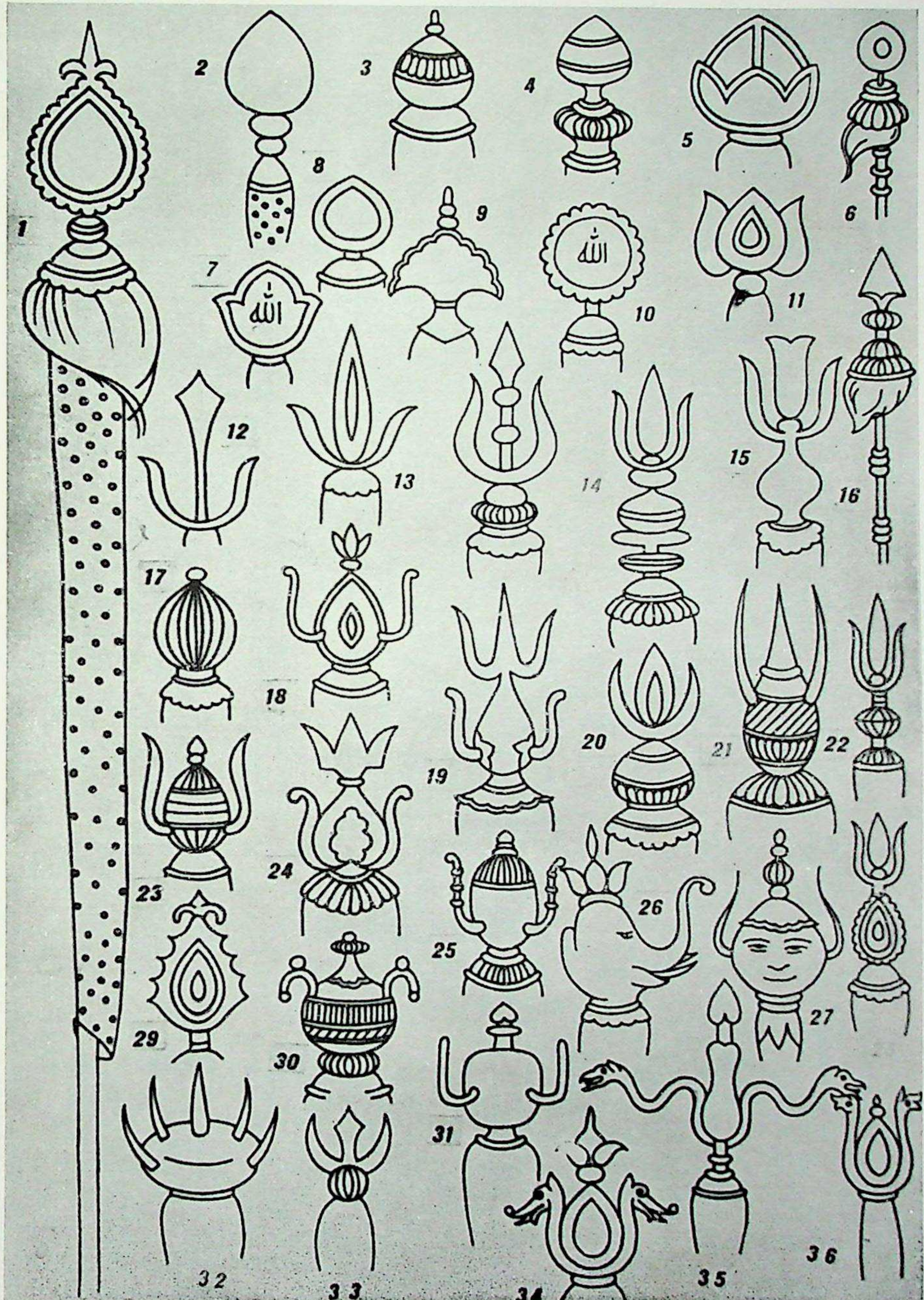
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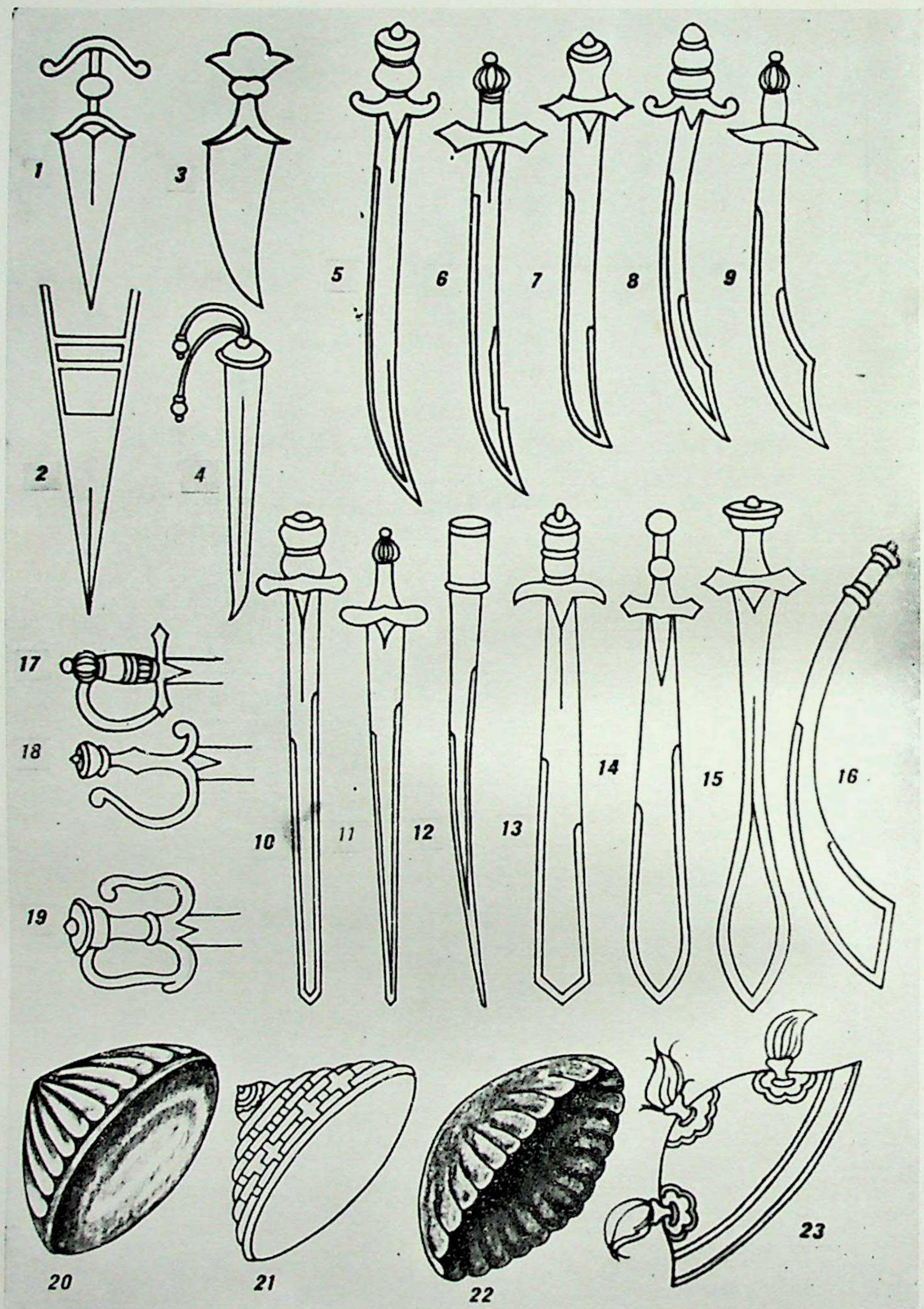
Pl. LV



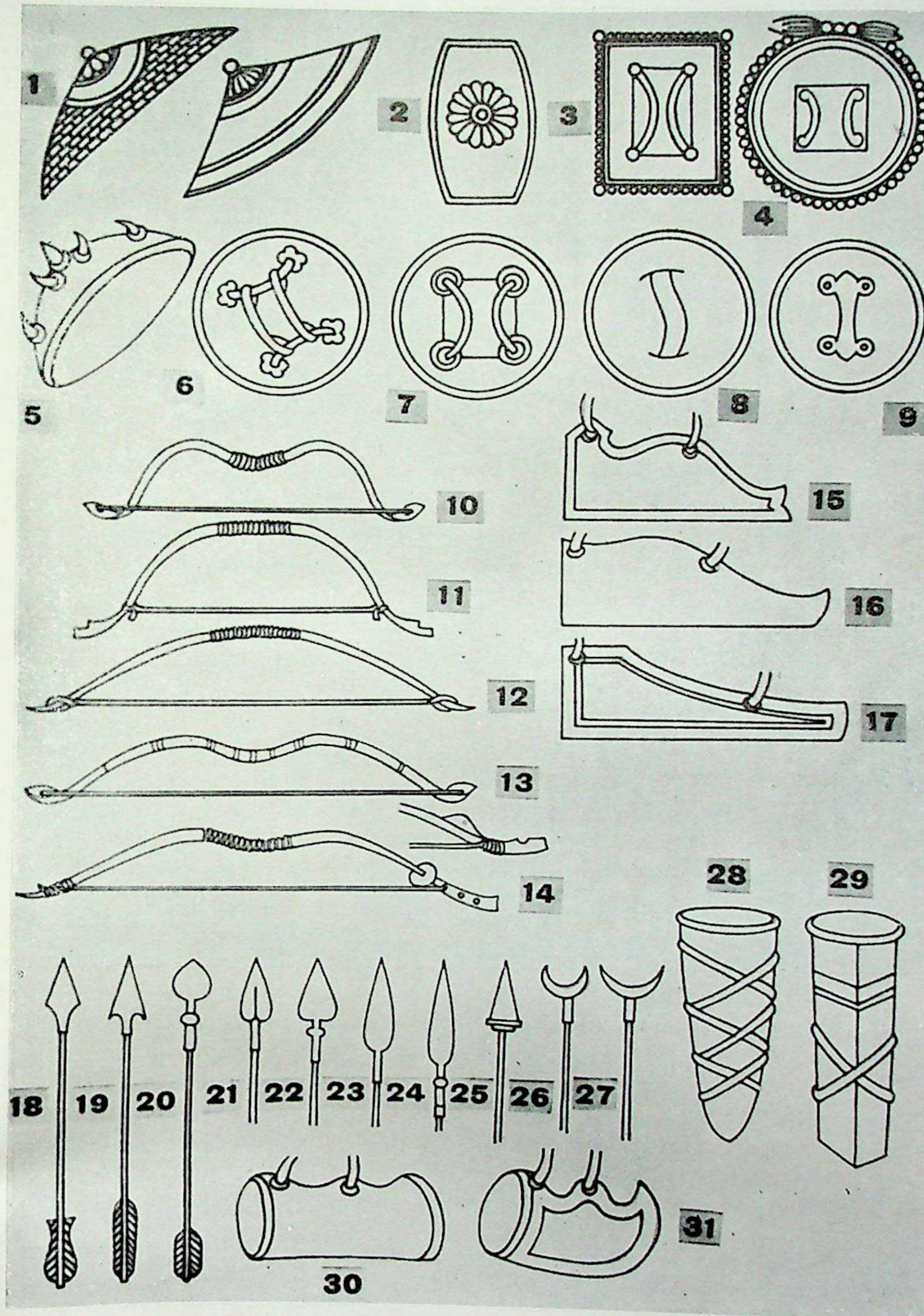
Pl. LVI


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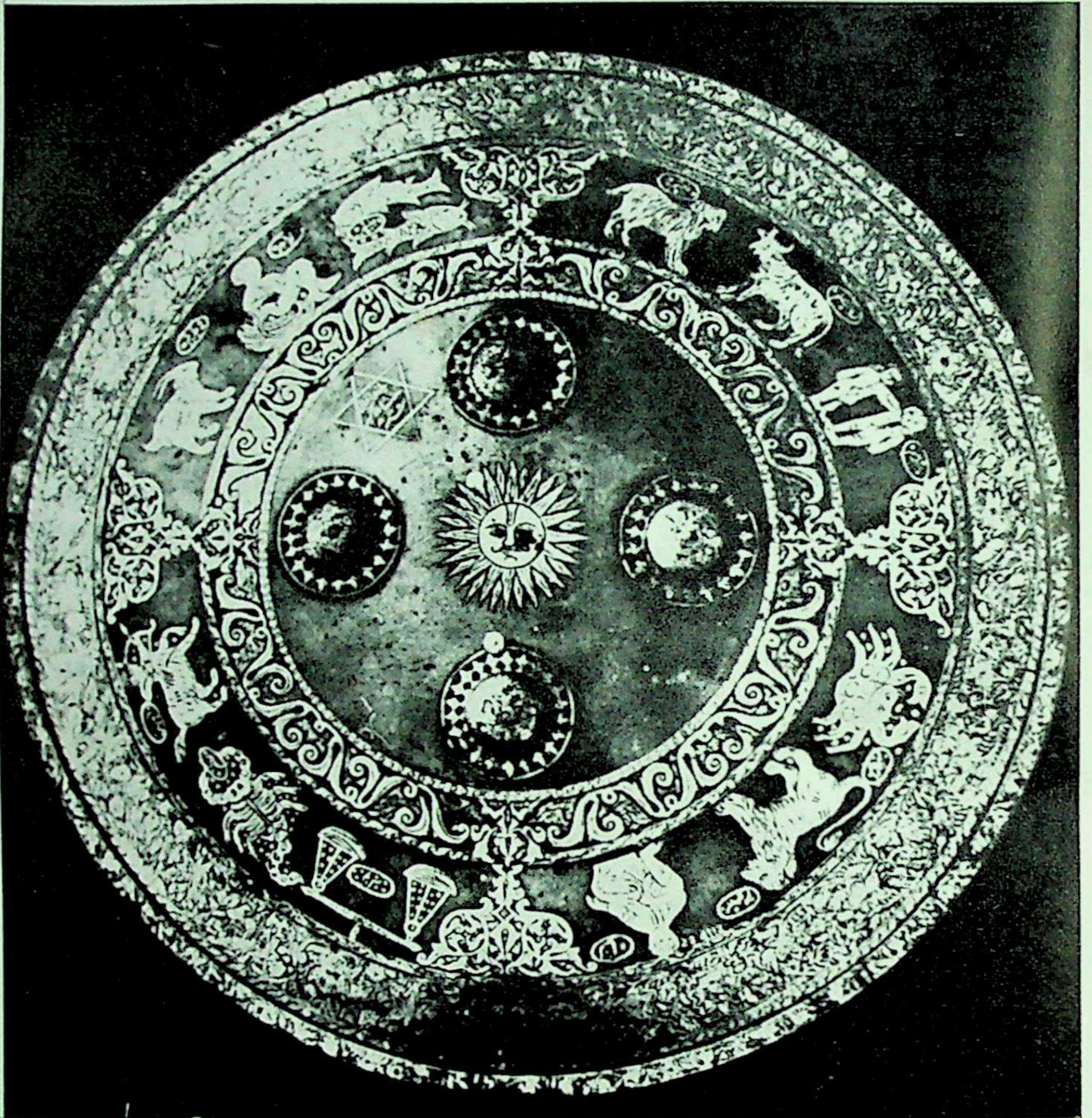
Pl. LVII



Pl. LVIII


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Pl. LIX



Pl. LX

8 arms and armour

As almost all the major military exploits of Akbar are represented in Mughal painting, it is possible to study the arms and armour in some detail. Akbar's arms included traditional weapons, e.g. swords, daggers, bows and arrows, spears, battle-axes, maces, etc. These were wielded by the foot-soldiers and cavalry. Besides these, Akbar had a great establishment of artillery, and a variety of fire-arms were introduced under him. Earliest references to Indian arms are found in the epics of the *Rām* and the *Mahā*. In more concrete forms we may observe different arms in the sculptures of Sanchi and Udayagiri.[1] Similarly, a pillar of Amravati tope, dated 300 years later than Sanchi, represents a few soldiers with their weapons: straight swords, long spears and long bows.[2] The Udayagiri cave of Orissa, dated 200 BC to AD 474 depicts a battle scene in which soldiers are shown wielding swords, oblong shields and long bows and arrows.[3] In the frescoes of Cave No. 16 at Ajanta, warriors are shown equipped with short swords and ornamented shields.[4] From this point of view, the sculptures at Bhuvaneswar, Jain sculptures at Saitron in Rajputana and the Sun-temple at Konark are of equal interest.

With the advent of the Mughals, a new chapter opened in the history of Indian arms—the introduction of fire-arms. There is a controversy regarding the extent to which fire-arms were known in ancient India. Egerton[5] and Elliot[6] are of the opinion that rockets or '*Agni Shāstra*' or weapons of fire were used and known in very early times. In the *Purānas*, the invention of fire-arms is ascribed to Vishvakarma. It seems that the knowledge of manufacturing gunpowder and the use of missiles vanished before to historic times and only naphtha balls remained in vogue. The early Muhammadan invaders in India used catapults and naphtha balls. In 1397, when Tīmūr invaded India, Sulṭān Mahmūd's

[1]Egerton, *An Illustrated Handbook of IndianArms*, fig. 2, p. 12. The sculptures of Sanchi and Udayagiri display various arms—sword, dagger, bow, arrows, spear, battle-axe, trident, infantry and cavalry shields. Cf. Cunningham, *The Bhilsa Topes*, pp. 215-16; pl. XXXIII.

[2]Fergusson, *History of Indian and Eastern Architecture*, p. 101, fig. 37.

[3]Egerton, *op. cit.*, p. 13, n. 4.

[4]Lieut. Cols, *Catalogue of Indian Art*, p. 51.

[5]Egerton, *op. cit.*, p. 10.

[6]Elliot & Dowson, *History of India*, VI, p. 481.

army was composed of 40,000 foot-soldiers, 10,000 horsemen and 125 elephants covered with armour, carrying *hawadas*, on which throwers of grenades (*r'ad-andāz*), fire-works (*ātash bāz*) and rockets (*tākhsh andāz*) took their positions.[7] Although the knowledge of pyrotechnics was so ancient matchlocks were surprisingly not known.[8] We no not find any mention of them in the equipment of Tīmūr's soldiers,[9] and neither do Nicolo Conti and Nikitin, the fifteenth century travellers, speak of them. Marco Polo and Ibn Battuta too, have not mentioned matchlocks. Therefore it may be presumed that most probably these did not exist.[10]

As regards the conventional weapons, their types and forms are more or less the same as described by Abu'l Fazl in the *Ā'in*,[11] though a few have escaped his attention. Abu'l Fazl has given a list of weapons, a few of which are shown on the plates of the manuscript.[12] Guns, matchlocks, etc., have been described separately but their drawings have not been included in the work. Therefore, to a great extent, we have to depend on the Mughal miniatures for the study of their forms. Several such paintings are preserved in the illustrated manuscripts. These have to be studied in the light of their descriptions given in the *Ā'in* and other chronicles.

ARMS

The chief weapon of war was the sword (Pl. LVIII, Figs, 5-16), the archery and artillery serving a comparatively limited purpose—that of mounting and dispersing attack from a distance. But in the decisive hours of clash, that is, during close fighting, nothing could be as effective as the sword. Though the variety represented in the paintings is immense, they can be broadly classified into two groups: the curved sword and the straight sword.

Blochmann[13] has mentioned only two types of swords: (i) the slightly bent sword and (ii) the *k͟handa* or straight sword. Egerton has listed three kinds, based on the original coloured drawings in the manuscript of the *Ā'in*.[14] These include the scimitar, the *bāneh*—a long sword which has a cross-hilt, and a narrow blade ending in an arrowhead, and the *bhelhetah*—a straight sword with a narrow blade and a basket hilt. The *bāneh* seems to have been used partly for thrusting and is a variation of the *paṭṭā*. The scimitar is for cutting and resembles the sword shown in Pl. LVIII, Fig. 9.

[7]Elliot & Dowson, *op. cit.*, III, p. 439.
[8]Egerton, *op. cit.*, p. 18.
[9]*Ibid.*
[10]*Ibid.*
[11]*Ā'in-i Akbarī*, tr. Blochmann, I, pp. 115-121.
[12]*Ibid*, pp. 117-119; pls. XII-XIV.
[13]Blochmann, *op. cit.*, p. 117, pl. XII, figs. 1 and 2.
[14]Swords: (i) Scimitar; (ii) *Bāneh*; (iii) *Bhelhetah*: cf. Egerton, *op. cit.*, pl. 1, figs. 19, 20, p. 23.

CURVED SWORDS

The Talwār

The commonest of the swords is the *talwār* (Pl. LVIII, Figs. 5-7), or sabre.[15] It is a cutting weapon and has only one edge. It is big enough to keep the adversary at a safe distance. Its three variations appear in miniatures. In the first, the blade is heavier, smoothly curved and pointed at the end. This was almost universally used; the second is almost similar except that it has a depression near the blunt edge; in the third, the blade is heavier than those of the first two. The upper edge of the blade is more or less parallel to the lower one, and at the end, is slightly curved. Its blade resembles that of the *kattī talwār*, a specimen of which is given by Egerton.[16]

The Shamsher,[17] *or Scimitar*[18]

Its blade is short and curved on each of its surfaces equally, the forward section heavier than that near the hilt. Its variations (both types have been painted in the miniatures, though the second more rarely) resembles the flachion of our days. Evidently, it was less favoured by the Mughal soldiers. (Pl. LVIII, Figs. 8-9).

STRAIGHT SWORDS

The Dhup

It was a straight sword with a cross hilt (Pl. LVIII, Fig. 10). Both the edges of the blade were parallel to each other, ending in a triangular point. The blade was broader than that of the *talwār* and appears to have been heavier. Its blade was double-edged and about 1.25 m. long.[19] The *dhup* was greatly favoured by the Deccanese.[20] Irvine is of the opinion that it was an ensign of royalty.[21] No such distinction is, however, evident from the illustrations where even common soldiers are shown wielding it.[22]

[15]*Ibid.*, p. 132, pl. XIII.

[16]*Ibid.*, p. 123, fig. 24.

[17]Irvine, *The Army of the Indian Moghuls*, pp. 75-76.

[18]Egerton, *op. cit.*, pl. I, fig. 18. The figure of the *shamsher* given in Blochmann, (pl. XII, fig. 1) greatly differs from that shown in Egerton's book. It resembles the *talwār*.

[19]Irvine, *op. cit.*, p. 76.

[20]*Ibid.*, Egerton, *op. cit.*, p. 117; also see Irvine *op. cit.*, p. 76, remark on Egerton's source.

[21]*Ibid.*

[22]*Razm*, pls. 43, 62, 65 (Jaipur); *Tā'rīkh*, ff. 12, 14, 43, 66, 69, 73, 101, 140, 147, 170, 227, 230, 337 (Patna); *Akb*, ff. 157, 225, 226 (CB), pls. 18, 20, 36, 41, 63, 98, 110 (VA); *Bāb*, ff. 54, 137, 204, 270, 285, 322, 453 (BM), pls. 2, 12, 13, 34 (Moscow).

The Paṭṭā

It was a long, light, narrow-bladed sword made like a straight rapier with a gauntlet-hilt (Pl. LVIII, Figs. 11-12).[23] This weapon did not find its way into the Mughal army and its use seems to have been restricted to holy men.[24] Even today, in a Muḥarram procession, the performers may be seen wielding the *paṭṭā* vigorously. In variations of it, the blade is slightly curved.

The Khanda

It is a double-edged weapon with a straight blade, gradually narrowing towards the hilt (Pl. LVIII, Figs. 13-15). It was the traditional sword of Orissa.[25] It had three variations, all with heavy blades, narrowing towards the hilt and gradually projecting outwards, so as to form a broad false edge with a conical or leaf-shaped end. One of its forms shows a depression in the middle of the blade on both sides. Two of its specimens are given by Egerton.[26] The illustration of the *khanda* given in the *Ā'in*[27] seems to be identical to that of the *dhup* and varies from those in the miniatures and the specimens given by Egerton.

Generally, the hilts were simple without protective devices, that is, the branch, *pas d'ane*, anneau, etc. These were smoothly curved and rounded above or sometimes flat and slightly curved inwards at the end. Usually the hilt was made of two or three spheres of varying forms. On the top, it was mounted with a button or pommel as in the swords depicted in the sculptures of Sanchi, Udayagiri and Jain sculptures at Saitron in Rajputana, and in the Arabian swords. Pommels were round, oval or square. The quillons were also simple in form. These are straight or slightly curved at the ends, sometimes embellished with knobs. The blades are attached firmly between pointed ecussons. Rarely do we come across hilts provided with knuckle bows (Pl. LVIII, Figs. 17-19). They could be on both sides of the hilt. It seems that the swords with cross hilts were greatly in vogue. In their most embellished form, the hilts were made of precious metals and were studded with the costliest jewels.[28]

The scabbards which were made of leather or wood, covered with velvet and strengthened with metallic mountings, were supported by the sword-belt (Pl LXV, Figs 19-20) or girdle from which they hung by two or three strings. Evidently, the wearer of the sword had grown accustomed to the inconvenience caused by the way the weapon was attached to the body.

[23]Two specimens of *paṭṭā* are mentioned by Egerton, *op. cit.*, pp. 109, 110, fig. 24.
[24]*Tā'rīkh*, f. 322 (Patna).
[25]Egerton, *op. cit.*, p. 104.
[26]*Ibid.*, fig. 24, p. 104.
[27]Blochmann, *op. cit.*, I, pl. XII.
[28]*Humāyūn-nāma*, tr. Beveridge, p. 124.

SHIELDS

According to the *Ā'in*, there were four kinds of shields, (Pls. LVIII, Figs. 20-23; LIX, Figs. 1-5), called the *sipar*, *dhāl*, *pahrī* and *kherā*.[29] Since the last type has not been described, it is difficult to ascertain its form, especially since the word is not found in the dictionary either.

The *dhāl* and *pahrī*[30] are evidently Indian terms. The *sipar* is the common iron shield, made either like a plain disk or concaved like the top of a funnel, rounded at the centre with loops inside for gripping. *Sipar*[31] seems to be a general term, appropriate for all kinds of shields. The decorative, geometrical weave-patterns shown on shields in the illustrations strongly point to their being made of cane. These are called the *pahrī*. The *dhāl* has been described by Blochmann[32] and Egerton[33] just as another kind of shield, perhaps we should take it to be no more than the ordinary shield made of hide. The first two were widely favoured by the Mughals. These were invariably round. Both the foot-soldiers and horsemen wielded similar shields. However, the foot-warriors of ancient India had a long elliptical shield.[34] It covered the bearer from head to knee and, therefore, could vary from 1.05 to 1.50 m. in length.[35] The shields of the horsemen were similar to those carried by the Mughals. They could be about 60 cm. in diameter and bell-shaped.[36]

The shields, square, rectangular, hexagonal, or oblong, are rarely represented in the miniatures, and do not appear as an equipment of a Mughal soldier. On a folio[37] of the *Tā'rīkh* (Patna), a long elliptical shield is depicted, and is similar to those wielded by the Indian foot-warriors and Greek soldiers. The Mughal soldiers slung their shields on their backs with cross strings fastened on the chest. In the battlefield, the soldier held it in his left hand and wielded the sword or spear with his right. For gripping, one or two loops were provided inside the shield (Pl. LIX, Figs. 6-9), and were attached straight or crosswise.

The outer surface of the shield offered a greater scope for ornamentation. In the illustrations given in the *Ā'in*,[38] the *sipar* and *dhāl* embellished with embossed floral patterns, knobs, crescents, etc., may be seen. Richly decorated shields with the patterns of Persian scroll work are seen in some Mughal paintings. A few have embellished borders. A plain or foliated

[29]Blochmann, *op. cit.*, I, pl. XIII, figs. 41-42, 63; p. 118.

[30]*Hindustani English Dictionary*, p. 580; Irvine, *op. cit.*, p. 78.

[31]Steingass, *s.v.*, *sipar*.

[32]Blochmann, *op. cit.*, I, pl. XIII, p. XXIV.

[33]Egerton, p. 23.

[34]*Ibid.*, fig. 2 (Arms from Sanchi and Udayagiri); (No. 3), p. 12 (oblong-shield—Orissa hill-cave) *Ibid.*, p. 13.

[35]*Ibid.*, p. 13.

[36]*Ibid.*

[37]*Tā'rīkh*, f. 65 (Patna); *Akb*, f. 148 (CB).

[38]Blochmann, *op. cit.*, I, pl. XIII, figs. 40, 41.

cap mounted with a knob or a pinnacle is fixed, as a matter of course, at the top of the shield. The iron shields definitely have a greater scope for ornamentation. Their sheets are plain or foliated, may or may not be studded with relief motifs. An iron shield of Akbar[39] presently at the Red Fort Museum, Delhi, is decorated with the signs of the zodiac (Pl. LX). The cane shields (*pahrī*) were decorated with woven geometrical patterns. These, too, were made firm with an embossed pinnacled top.

The shields held by the guards were ornamented with the fluff of yaks' tails or with small bells attached to its circumference.[40] Rarely do we come across an iron shield with small spikes, curved like a horn.[41] Shields of hide were generally plain.[42]

DAGGERS

In the miniatures, the daggers (Pl. LVIII, Figs. 1-3) are generally represented with their sheaths tucked beneath the girdle. The blade is seldom exposed to view. Only three types of daggers are shown in the illustrations. The commonest of them are the *jamdar*[43] and the *k͟hanjar*.[44] The former consists of a broad, flat, triangular blade attached to a hilt embellished with cross bars (Pl. LVIII, Fig. 2). The numbers of the cross-bars varies from one to two and are made straight, or from spheres of different sizes just enough for the grip. This is a Hindū *katār*.[45] Two other variations of the *jamdar's* blade are depicted in the *Ā'in*.[46] These have forked blades and are called *jamdar doulikaneh* (two-pointed dagger), and *jamdar sehlikaneh* (three-pointed dagger). The *jamdars* described by Egerton[47] have various styles of blades and measured from 23 to 45 cm. Among the other daggers provided with cross-bar grips are the *katāra* (a long and narrow dagger), and the *narsink moth* (a short and narrow dagger).[48]

The *k͟hanjar* had a single, leaf-shaped, curved blade, broad near the hilt and terminating in a fairly sharp point at the end (Fig. 3). It could have a single or double curved blade. The *k͟hanjar* shown in the *Ā'in* is double-curved and consists of a basket hilt like that of the sword.[49] Such hilts have not been painted in the miniatures. There are simple hilts made

[39]*Encyclopaedia of World Art*, I, pl. 454.
[40]*Akb*, pl. 33 (VA).
[41]*Razm*, pl. 43 (Jaipur).
[42]*Tā'rīk͟h*, f. 131 (Patna); *Akb*, pl. 63 (VA).
[43]Blochmann, *op. cit.*, I, pl. XII, fig. 4, p. 117.
[44]*Ibid.*, fig. 5.
[45]*Britannica Encyclopaedia*, XXI, p. 693.
[46]Egerton, *op. cit.*, pl. I, figs. 26, 32, p. 23.
[47]*Ibid*, pp. 102, 109, 116, 131. See pl. IX, pl. X, pl. XIII, figs. 634, 637.
[48]Blochmann, *op. cit.*, I, pl. XII, figs. 9-10, p. 117; Egerton, *op. cit.*, pl. I, figs. 21, 33.
[49]*Ibid.*, I, pl. XII, fig. 5.

without protective devices and ecussons. The blade is directly attached to the quillons. The hilt is made of spheres mounted with a pommel or a cusped knob. The specimens of the *k͟hanjar* listed by Egerton[50] are mostly double-curved and are about 30cm. long. The *k͟hanjar* made with a single curve, bears close resemblance to the *khapwa* or the *jhānwa*.[51] These are not mentioned in the list of weapons given by Blochmann. A dagger made with a blade similar to that of the *jamdar* and the hilt like that of a *k͟hanjar* is called a quillon dagger (Pl. LVIII Fig.1).[52] Egerton has called it a *jamdar katāri* and has mentioned two of its specimens.[53] Their lengths are 34 cm. and 37 cm. respectively. This weapon is not mentioned in the *Ā'in*

Bābur has incidentally mentioned three types of daggers: a broad dagger set with jewels, which is the same as the *jamdar*; the *k͟hanjar*, also a jewelled weapon and an enamelled waist dagger.[54] There was no special shape for the last, which differed from the others only in material. Jahāngīr has mentioned the *phūl katāra*,[55] so called after its manner of decoration—*katāra*.

The dagger, commonly worn under the girdle, was carried by nobles, chiefs and royal attendants. Their hilts were invariably without branches, *pas d'ane*, anneau, and ecussons. The quillons were small and straight or slightly curved. The ornamentation of the hilt and sheath of the dagger was very similar to that of a sword. At their finest, they were gilted, enamelled and studded with precious stones and metals. Jahāngīr has mentioned a jewelled dagger which cost Rs 2,000.[56] In another instance, a jewelled dagger studded with a ruby, offered to Jahāngīr on 19 March 1616, was valued at Rs 50,000.[57]

The Gupti Kārd[58]

The weapon shown in the illustrations closely resembles the *kārd* represented in the *Ā'in* (Pl. LVIII, Fig. 4). It was a knife for thrusting, kept in a sheath and had a gauntlet. The blade was narrow like that of a rapier. A weapon of the commoners, it was hung on the waist with the string fastened at the top of the hilt.

[50]Egerton, *op. cit.*, pp. 116, p. 131, pl. X.
[51]*Ibid.*, pl. I, figs. 28, 29.
[52]*Britannica Encyclopaedia*, I, p. 693.
[53]Egerton, *op. cit.*, p. 102; pl. IX.
[54]Cf. *Bāburnāma*, tr. Beveridge, II, p. 528; *k͟hanjar*—enamelled waist dagger—p. 304.
[55]*Tūzuk-i Jahāngīrī*, tr. Rogers and Beveridge, I, pp. 172 ,256.
[56]*Ibid.*, p. 253.
[57]*Ibid.*, pp. 317-18.
[58]Blochmann, *op. cit.*, I, p. 117; pl. XIII, fig. 29.

SPEARS

The spear (Pl. LXI, Figs. 1-13) is the chief weapon of the horsemen. The guards, attendants, etc., carried it as a matter of course. They are seen in numerous forms in the *Ā'in*.[59] These include the *neza*, *barchhā*, *sāk*, *selara*, *sainthī* and *tschehouta*. The commonest of them were the *neza* and *tschehouta*, greatly favoured by the cavalry. The *neza*, with a small arrow-shaped head of steel fixed to a long bamboo shaft, was the cavalry lance (Pl. LXI, Figs. 5-6).[60] The narrow blade of the *neza*, shown in the *Ā'in*, greatly resembled that of the *bhālā*, a lance with a narrow head.[61] The blades of other cavalry lances were long, three- or four-sided or sometimes leaf-shaped, ending in a fairly sharp point similar to the head of the *sāk* (Pl. LXI, Figs. 8, 10). Besides these, we come across lances with blades at both ends. The blade fixed at the upper end is longer and occasionally with a flag near it on the shaft. Both these blades are of different patterns viz. a combination of the *neza* and *sāk*, or the *sainthī* and *selara* (Pl. LXI, Figs. 2-4). A lance consisting of blades on both ends has been reproduced by Egerton from the *Ā'in*.[62] Its blades too are of different patterns and it is called the *tschehouta*. Blochmann and Irvine have not mentioned it. The javelin—a lance with a long, narrow head—was also used by the cavalry.[63] The lances with bamboo shafts were light and convenient to wield. Lastly, the spear having a head, longer and narrower than that of the *neza* or *sainthī* resembled the *selara*, but its blade was shorter than that of the *sāk* (Pl. LXI, Fig. 7).

The lance of the infantry was heavier (Pl. LXI, Figs. 11-13). Their blades were shaped like a large leaf fixed to a steel or wooden shaft, and could be called the *ballam*.[64] It is a short spear with a broad head. Egerton has described two types of *ballams*.[65]

The trident, known as the *trishūl* is a typically Indian weapon. It is commonly carried by holy men and associated with Lord Shiva. It has many forms, some of which may be observ ed in the sculptures of Sanchi and Udayagiri.[66] They are not different from those of the Mughal miniatures, or those used in modern times. A battle scene depicted in the *Akb* shows *jogīs* and *sannyāsīs* wielding this weapon.[67] It has a triple forked blade (Pl. LXI, Fig. 14). The blade in the middle is similar to that of the

[59] *Ibid.*, pl. 117, pl. XII, figs. 16-20.

[60] Steingass, *s.v.*, *neza.*

[61] *Hindustani English Dictionary*, p. 386. "*Bhālā* I take to be only the Hiṇdi equīvalent for *Nezah*." Irvine, *op. cit.*, p. 82.

[62] Egerton, *op. cit.*, pl. I, fig. 12.

[63] *Ibid.*, fig. 13.

[64] *Hindustani English Dictionary*, p. 354.

[65] Egerton, *op. cit.*, p. 78, fig. 17.

[66] *Ibid.*, fig. 2.

[67] *Akb*, pls. 61, 62 (VA).

selara, and the other two on its two sides are curved like the stiff neck of a swan. This was not a weapon of the Mughal soldier. However, in one instance, a few attendants, probably guards, are shown carrying it.[68]

The cavalrymen held the spears in their right hand; while attacking the spears were held at arm's length above their heads. For a stronger grip, the cavalry lances were fastened with knobs or rings at the centre of the shaft. The metallic caps, knobs, pinnacles, etc. were fitted at the lower end of the shaft to make it firm.

AXES

The Battle-axe (Pl. LXI, Figs. 16-39)

The battle-axe was wielded by royal attendants and guards who are shown carrying it in their hands or on the shoulders. The types shown in the illustrations are the *tabar*, *tabar-jāghnol* and *tarangala*.[69] The *tabar* is a simple battle-axe consisting of a curved blade, with a broad cutting edge (Pl. LXI, Figs. 16-17). It seems to be the commonest form of the axe. The *tabar* may also be observed in the sculptures of Sanchi and Udayagiri.[70] There are no less than nine styles of *tabars* described by Egerton.[71] Those with heavier blades had two or three sockets. According to Egerton, the size of the blades varied from 18 to 23 cm. and were sometimes 38 cm. in length.[72] The *tabar* shown in the *Ā'in* has a triangular blade with a broad edge.[73] A great variety of blades have been represented in the paintings (Pl. LXI Figs. 19-36). These are curved like an arch, or doubly curved, or have a circular depression in the middle. In a few, the upper half of the blade is elongated. The battle-axe with a spike opposite the blade is similar to the pole-axe of our days. The blade designed with a spearhead is called *tarangāla* (Pl. LXI, Fig. 18). The *tarangāla* is a combination of a spear and the *tabar*.

The *jāghnol* contains a crow-bill shaped blade. We do not come across it in the miniatures. A double-headed axe with a pointed blade like that of the *jāghnol* on one side and opposite to it, one similar to that of the *tabar*, is rarely depicted in the Mughal paintings (Pl. LXI, Fig. 37) It is called the *tabar jāghnol*. The last two do not appear to be in common use. The axe of a holy man consists of a chisel-like blade attached vertically to a long handle (Pl. LXI, Fig. 39). Lastly, the axe similar to the carpenter's adze, called the *busolā*, is shown breaking the doors of a fortress

[68] *Ibid.*, pl. 21.
[69] Blochmann, *op. cit.*, I, p. 117, pl. xii, figs. 22, 24, 26.
[70] Egerton, *op. cit.*, p. 82, fig. 2.
[71] *Ibid.*, pp. 82, 108, 137, 144. See fig. 17, pls. X, XIV.
[72] *Ibid.*, p. 78. See fig. 85.
[73] Blochmann, *op. cit.*, I, pl. XII, fig. 22.

Fig. 38). But it is different from what Blochmann[74] calls the *busolā*. Its figure, given on pl. XII, fig. 35 *Ā'in*, looks more like a chisel than any other tool.

The shafts of the axes were simple, occasionally mounted with metallic caps, or knobs, or pinnacles on both ends. The blades were also sometimes ornamented. The battle-axes made of gold and silver, embellished with embossed patterns were displayed by the attendants in the hall of audience.[75] Bābur has incidentally mentioned the *tabar zīn* (saddle-hatchet).[76] Egerton does not speak of it. It is called the *chamkhāq*, *chakhmāq*, *chakhmāgh*[77]—a battle-axe fastened to the saddle.

MACES

A rich variety of the maces (*gurz*)[78] (Pl. LXII, Figs. 1-24) are seen in Mughal paintings. These include the types maintained in the *Ā'in*.[79] Simple in form is the *shash-par* or six-flanged mace (Figs. 1, 5). Blochmann's[80] interpretation in favour of the term *shashbur* (*shash*—lung, *bur*—tearing) instead of the *shash-par* seems incorrect. The mace shown in the *Ā'in* has flanges on the ball. The *shash-par* can be defined as a mace with six flanges on it (*shash*—six, *par*—side; *shash-par*—an iron mace, Steingass, s.v.). Bābur has casually mentioned it in his memoirs as *shash-par* (a six-flanged mace).[81] Jahāngīr has also mentioned a mace called *shash-pari*.[82] It was a short-handled club with a single globular head, on the top of which was mounted a knob or pinnacle. Egerton,[83] too, has mentioned the term *shash-par* instead of *shashbur*.

The *piyāzī*, so called because the end was large and spherical like an onion, was also a straight mace (Pl. LXII, Figs. 3, 12-13). The sphere was made with foliated surfaces. Beveridge describes it as a rugged mace,[84] having many craggy, uneven projections. The *kistīn* had a longer handle, to the end of which the sphere was attached by a chain or a string like the athlete's throwing hammer (Pl. LXII, Figs. 7-11). The sphere was similar to that of the *shash-par*. It could be plain, or with flanges or transverse bands about it. The head, trifoliated or cusped like an arch, with eight sides, was used. The *kistīn* and the *piyāzī* as mentioned in the *Ā'in* have not been defined by

[74] *Ibid.*

[75] Egerton, *op. cit.*, p. 108 (note to No. 375).

[76] Beveridge, *Bāb*, *op. cit.*, I, p. 160.

[77] Irvine, *op. cit.*, p. 81; Pant, *Studies in Indian Weapons and Warfare*, p. 857; Steingass s.v. *chamkhāq*.

[78] Steingass, *s.v.*, *gurz*.

[79] Blochmann, *op. cit.*, I, p. 117, pl. XII, figs. 21, 23.

[80] *Ibid.*, pl. XII.

[81] Cf. Beveridge, *Bāb*, *op. cit.*, I, p. 160.

[82] Rogers and Beveridge, *op. cit.*, I, p. 311.

[83] Egerton, *op. cit.*, p. 23, (*Shash-par*—globular mace).

[84] Beveridge, *Bāb*, *op. cit.*, I, p. 160.

Blochmann.[85] He gives no figures and seems doubtful as to what the *piyāzī* was. The relative differences in the *shashpar*, *kistīn* and *piyāzī* are obvious from the memoirs of Bābur.[86] The *kistīn* resembled the mace, called a flail shown on pl. I, fig. 24, reproduced from the *Ā'in*, by Egerton.[87] The latter has a hexagonal ball attached to a handle with a chain. The flail could be furnished with two balls attached separately by the chains to a handle. A specimen is given by Egerton.[88]

The *gurz* mentioned in the *Ā'in*[89] with three balls similar to that of the *shash-par*, fastened separately to the top of the shaft, has escaped the notice of the artists. A few other types of the *gurz* are known (Pl. LXII, Fig. 14). These are made with many globular heads, i.e., one head above the other.[90] The heads towards the end are smaller. A mace with a single round head is called a *gadā*.[91] A few others consist of trifoliated, or six-bladed or eight-bladed heads (Pl. LXII, Fig. 23). The last two are termed *dhārā* and *gargurz* respectively by Egerton.[92]

A thick stick tapering towards the lower end, with two or three iron rings about the upper part of the shaft, was the simplest form of the mace (Pl. LXII, Fig. 24).

The shafts of the maces were ornamented with embossed rings, spheres, bands etc. The shafts are made of steel—round, four-sided or octagonal—with a button at the end. Round, trifoliated or cusped forms attached to the balls seemed to be ornamental pieces. In their most embellished form, the maces were made of gold and silver. Jahāngīr has mentioned a mace—the *shashpari*—made of gold.[93]

The mace-bearers were called the *yasāwulān*, *tawāchiyān* or *chobdars*.[94] Generally, the royal attendants carried the maces. However, the horsemen also wielded them casually. They employed it in hand-to-hand fighting or to break fortified doors.

The Khār-i māhī

The *khār-i māhī* (Pl. LXII, Fig. 25) is another weapon that may be observed with the mace. It consists of many steel spikes projecting on both sides of a straight handle. Abu'l Fazl has mentioned it in the *Ā'in*,[95] but it does not appear to be the weapon of a Mughal soldier.

[85]Blochmann, *op. cit.*, I, p. 117.

[86]"He used to say that of arms there are the *Shash-par* (six-flanged mace), the *piyāzī* (rugged-mace), the *Kistīn*, the *tabar zīn* (Saddle-hatchet) and the *baltu* (battle-axe), all, if they strike, work only with what of them first touches, but the sword, if it touch, work from point to hilt." Beveridge, *Bāb*, *op. cit.*, I, pp. 160-161.

[87]Egerton, *op. cit.*, p. 23.

[88]*Ibid.*, p. 78, fig. 15.

[89]Blochmann, *op. cit.*, I, pl. XII, fig. 23, p. 117.

[90]Egerton, *op. cit.*, p. 123; pl. X.

[91]Pant, *op. cit.*, p. 155.

[92]Egerton, *op. cit.*, p. 115, 118.

[93]Rogers and Beveridge, *op. cit.*, I, p. 311.

[94]*Ibid.*, II, pp. 8, 14.

[95]Blochmann, *op. cit.*, I, p. 118, pl. XIII, fig. 37.

BOWS

The cavalrymen carried the bow (Pl. LIX, Figs. 10-14) along with other arms. These are generally of two types. The first is the *takhsh-kamān*.[96] It was a small slur bow (Pl. LIX, Figs. 10-11), shaped in a single or double curve. Blochmann has defined it as a small bow. Steingass describes it as a cross-bow.[97]

Another bow, called the *kamān*, is larger (Pl. LIX, Fig. 12).[98] Lastly, a long bow shown in the illustrations is the *kamṭhā*. It has been mentioned in the *Ā'in*.[99] Blochmann describes the *kamṭhā* and the *kamān-i guroha* (a pellet bow) as being the same[100] but this seems incorrect. The *kamṭhā* is a long bow made of bamboo,[101] a common weapon of the Indian warrior (Figs. 13-14). It may also be shaped in a single or double curve. Bābur speaks of three different types of bows, translated by Beveridge as the slur bow, easy bow and stiff bow.[102] The Mughal soldiers preferred small slur bows, convenient enough to be carried along with other arms. An unstrung bow has been depicted on f. 54 *Akb* (CB).

Egerton has described the Persian bow in detail and the same description may be applied to the Mughal bows also.[103] It seems that sometimes bows were made of steel. One such Mughal bow of the early seventeenth century, embellished with the verses from the *Qurān* is preserved in Delhi.[104]

The grip was covered with cloth, usually velvet. The notches, called *goshā*, were occasionally decorated with the motif of an animal head.

ARROWS

Commonly, the arrows or *tīrs* (Pl. LIX, Figs. 18-27) were of two types: one having a leaf-shaped blade with a button at the base (Pl. LIX, Fig. 22). The blade of the other had straight sides (or slightly curved inside), ending in points projecting on both sides a little above the base (Pl. LIX, Figs. 18-19). It resembles a kite with an elongated head. Others have almond-shaped heads (*ṭarḥ-i bādām*) (Pl. LIX, Fig. 20), crescent heads (*ṭarḥ-i hilāl*) (Pl. LIX. Figs. 26-27), and thorn-shaped heads (*ṭarḥ-i khār*) (Pl. LIX, Figs. 23-24). In the *Dastūr-ul Inshā* the names of a few other arrows have also

[96] *Ibid.*, p. 117, pl. XII, figs. 12, 13.
[97] Steingass, *s.v.*, *takhsh kamān*,
[98] Blochmann, *op. cit.*, I, p. 117, XII, fig. 11.
[99] *Ibid.*, p. 118.
[100] *Ibid.*, p. xxiv, pl. XIII.
[101] Steingass, *s.v. kamṭhā.*
[102] For slur bow see Beveridge, *Bāb*, *op. cit.*, I, p. 143. For easy bow, *ibid.*, II, p. 42?. For stiff bow, *ibid.*, p. 490.
[103] Egerton, *op. cit.*, p. 144.
[104] Pant, *op. cit.*, pl. 3, p. 63.

been mentioned.[105] The blades were of steel and fixed to shafts made of reed or wood. The length of the arrows varied according the size of a bow. Two specimens of arrows mentioned by Egerton measured 70cm and 180cm in length.[106] Evidently, their length was determined according to the different types of bows—small or large. Jahāngīr[107] mentions the pointless arrow which was called *tukkā*.[108] Feathers were closely glued all about the base of the stem in the shape of a spandrel.

Quivers

The Mughals carried arrows in the *tarkash*[109] (quivers) hung across the girdle on the right side, instead of on the shoulder (Pl. LIX, Figs. 30-31). The quivers were of two types. One of them was cylindrical, round, but with one side straight and the other smoothly concave from end to end or with two crescent-like curves (Pl. LIX, Figs. 30-31). They bore resemblance to a bucket. The forms were similar, only the curves differed. They were invariably small and held the arrows to the middle. The quivers were slung horizontally from the waist—there were loops on its concave side to fasten it with strings.

Others were long and cylindrical, with the sides gradually narrowing towards the end. They had straps to sling across the shoulder. This type of quiver was frequently used by the Indian warriors and Greek soldiers and not by the Mughals (Pl. LIX, Figs. 28-29).

Qirbān

The bow was carried in a case called the *qirbān*[110] (Pl. LIX, Figs. 15-17) hung on the left side of the girdle. Pant has wrongly interpreted the *qirbān* as a different name for thu Mughal quiver.[111] It is of the shape of a half bow and is sufficient to accommodate only as much. The other half of the bow remains outside of it. It was a flat case, broad at the mouth, with one side straight and the other sloping to a point. Irvine says that both the bows and arrows were carried in a quiver—the *tarkash*. He feels that there must have been separate bow-cases called the *qirbān*.[112] However, in the miniatures the *tarkash* and the *qirbān* are shown to hold the arrows and bow separately. Only in certain situations, when the attendants or insigni-holders carried the bow and arrows, they kept them in the *qirbān*. But it

[105]Cf. Irvine, *op. cit.*, p. 98.

[106]Egerton, *op. cit.*, p. 130.

[107]Rogers and Beveridge, *op. cit.*, I, p. 115.

[108]Steingass, *s.v.*, *tukkā*. (Several such arrows of seventeenth and eighteenth centuries are preserved in the Arms Gallery, Delhi.

[109]Egerton, *op. cit.*, pl. I, fig. 15; Blochmann, *op. cit.*, p. 117, pl. XII. The figures of the quiver (*tarkash*), given by Blochmann are different from those observed in the miniatures and in Egerton's book.

[110]Steingass, *s.v.*, *qirbān*.

[111]Pant, *op. cit.*, p. 58.

[112]Irvine, *op. cit.*, p. 100.

cannot be accepted as a matter of rule that the *qirbān* was meant to hold arrows also.

The quivers and bow-cases were generally made of leather or wood and covered with velvet which was richly embroidered. We are told that when Humāyūn, while in exile in Persia, visited Shāh Tāhmāsp, he was not offered a carpet to sit on.[113] One of his followers ripped ofl the cover of a quiver and spread it over the ground.

FIRE-ARMS

The kind of matchlock found in the illustrations has a form identical to those of the earliest hand-guns developed in Europe in the middle of the fifteenth century. Akbar encouraged the manufacture of matchlocks, guns and cannons.[114] Abu'l Fazl mentions that with the exception of Turkey, probably no other country was equal to the Mughals in this field.[115].

The *narnāl* was the most popular hand-gun (Pl. LXIII, Figs. 1-3). It was a matchlock named by Akbar,[116] and so called because it could easily be carried by one man. It had a long barrel mounted on a butt and was fired with the butt resting on the right shoulder. Generally, the hand-guns were fired like cannon. Fire was put in the priming-pan, and the guns were loaded with muzzle-loading rods. The flint-lock was little known during Akbar's time.[117] Abu'l Fazl has referred to the guns which were fired without a match, but by a slight movement of the cock.[118]

The length of the guns varied. Generally, these were 1.15 to 1.80m. The smaller kind of gun was called *damanāk*.[119]

The *gajnāl*,[120] rarely represented in the paintings, has been mentioned in the *Ā'in*.[121] It was heavier than the *narnāl* and was carried on the back of an elephant (Pl. LXIII Fig. 6). *Gajnāl* is a name for a light cannon.

The heavy pieces of cannon were long-barrelled, gradually narrowing towards the end with a funnel-shaped opening (Pl. LXIII, Fig. 4). The barrel rested on two or four wheels, depending on its size and weight (Pl. LXIII, Figs. 11-12). These were generally embellished with metallic bands and engraved designs. Abu'l Fazl states that heavier cannons were transported by several elephants, and a thousand cattle.[122] The cannons

[113]*Tezkereh al Vakiāt*, tr. C. Stewart, p. 73.
[114]Blochmann, *op. cit.*, I, pp. 119-123.
[115]*Ibid.*, p. 119.
[116]*Ibid.*
[117]Wilkinson, *Engines af War*, p. 67; Irvine, *op. cit.*, p. 105.
[118]Blochmann, *op. cit.*, I, p. 120.
[119]*Ibid.*, p. 120.
[120]*Akb.*, f. 178 (CB).
[121]Blochmann, *op. cit.*, I, p. 119.
[122]*Ibid.* See *Akb*, pl. 72 (VA).

were dragged unmounted along the road. Carts especially built to transport the guns were also used.[123] The cart was made long enough with a circular groove in the middle to accommodate the barrel (Pl. LXIII, Fig. 5).

Lastly, the gun called the *jazā'il*, resting on a tripod, is shown being used in a siege.[124] This is a long-barrelled gun (Pl. LXIII, Figs. 9-10). It has not been mentioned by Abu'l Faẓl. Steingass has described the *jazā'il* as a large musket, a wall-piece swivel, a rifle used with a prong or rest.[125] Egerton has referred to the *jazā'ils* being 2.10 and 2.40m. long.[126] The tripod called *shākh-i tufang* was the part of the equipment of matchlocks.[127] It was made of wood and was fastened with iron chains. The heavy cannon could also be placed at an angle. For this purpose, a triangular wooden stand consisting of a sloping platform was employed (Pl. LXIII, Fig. 7).

Abu'l Faẓl states that for sieges and naval engagements, there were separate guns,[128] but he has not given their descriptions. H*b* also mentions the *bān*,[129] (rocket), but this is not seen in the miniatures. It is a kind of fire-work and consists of a hollow tube filled with some combustible material. In the *Ā'in* (I, Pl. XIV, fig. 62) it is shown mounted with a flag at the top and seems equal in length to an arrow.

CHAKRA

The *chakra* (quoit) (Pl. LXII. Fig. 26) an ancient Indian weapon associated with the Hindu god Lord Krishna, was a flat metallic ring with a sharp razor-like outer edge. *Sannyāsīs* and *jogīs* wielded it.[130] It was not a weapon of the Mughal soldier, though Abu'l Faẓl has mentioned it.[131]

ELEPHANT GOAD

The Gajbāg or Ankush

Abu'l Faẓl has placed it among the weapons.[132] It is the common

[123]*Tā'rīkh*, f. 62 (Patna). Such a carriage is represented in the illustration.
[124]*Akb*, pl. 74 (VA); *Tā'rīkh*, ff. 61, 326 (Patna).
[125]Steingnss, *s.v.*, *jazā'il*.
[126]Egerton, *op. cit.*, p. 124.
[127]Irvine, *op. cit.*, p. 104.
[128]Blochmann, *op. cit.*, p. 119.
[129]*Ibid.*, p. 112; pl. XIV, fig. 62.
[130]*Tā'rīkh*, f. 322 (Patna); *Akb*, pls. 61, 62 (VA)
[131]Blochmann, *op. cit.*, I, p. 117, pl. XII, fig. 25.
[132]*Ibid.*, p. 118; pl. XIII, fig. 39.

elephant goad. For driving and controlling the elephant, the *ankush*,[133] the *gaḍ*[134] and the *jagāwat*[135] were the only implements. The *ankush* was made like a large iron hook. The stem is like an arrow, but at the outer end there is a hook. Akbar called it the *gajbāg*. The elephants were trained to the goading of this implement. The *gaḍ* was a spear having two prongs instead of an iron point. The prongs were curved like the stiff neck of a swan. As with the *ankush*, elephant-drivers pierced the animal with the *gaḍ* when he became refractory. On f. 248 *Akb* (CB), a few attendants, laced with the *gaḍ*, are shown engaged in controlling an elephant. The *jagāwat* is similar to the *gaḍ* except for the prongs. A round peg, having a depression in the middle, and fixed horizontally to a small shaft, formed a *jagāwat* (f. 326 *Akb* CB). It was used to provoke the animal active and to quicken his speed.

ARMOUR

The Mughal army is shown well-armoured while taking the field, and it includes those charged with such auxiliary assignments as beating the drums, driving the elephants and carrying the royal insignia. The metallic armour of a soldier consisted of five to six pieces including a helmet, a coat of mail, arm-guards, leg-guards and sometimes a pair of plates fastened on the chest and the back. The armour worn under the *zirih*, or the *bagtar* is not visible.

The Helmet

The helmets (Pl. LXIV, Figs. 1-20) were dome-shaped, plain or foliated, surmounted by a pinnacle, shaped like an arrowhead or a plume or a knob. They are often represented in the paintings and can be broadly divided into three categories.[136] One called a *dubalgha* is just a head-cover intended to protect the skull (Pl. LXIV, Fig. 1, 12).[137] The other two were called *zirih kulāh*.[138] One of these is provided with side plates to protect the ear. Separate pieces of the plates are connected to the helmet, or the helmet may be cast in one piece with them. Plates are round or V-shaped or sometimes foliated at the end (Pl. LXIV, Figs. 2-13). The other possessed in addition a broad chain-sheet at the back, covering the back

[133]"The *Ankus* is a small crook. His Majesty calls it *Gajbāga*. It is used for guiding the elephant and stopping him." *Ibid.*, p. 136.

[134]"The *Gaḍ* is a spear which has two prongs instead of an iron point. The *Bhoī* makes use of it when the elephant is refractory." *Ibid.*, p. 137.

[135]"The *Jagāwat* resembles the *Gaḍ* (No. 28), and is a cubit long. The *Bhoī* uses it, to quicken the speed of the elephant." *Ibid.*

[136]*Ibid.*, p. 118.

[137]*Ibid.*, pl. XIII, fig. 43.

[138]*Ibid.*, fig. 45.

and the sides of the neck (Pl.LXIV, Figs. 15-18). This sheet was made of small chains or plates hinged together. Sometimes the chain-mail could be connected with the *dubalgha* (Pl. LXIV, Fig. 14).

To protect the nose, sometimes a long, flat narrow plate with an arrowhead on both sides was fixed in front of the helmet (Pl. LXIV, Figs. 12-13, 18). Several types of helmets are mentioned by Egerton (compare the figures on pl. XII (587 T, 590), XIII (703, 704), fig. 28, p. 119. fig. 30, p. 125 and fig. 33, p. 134.[139] Besides these, we come across a European helmet consisting of an extra plate to protect the forehead, but it is rare. The dome of the helmet is slightly elongated and is surmounted by a pinnacle at the top like that of the Mughals (Pl. LXIV, Fig. 19). The helmet shown in f. 61 *Tā'rīkh* (Patna) is a synthesis of the Mughal and European helmets, and seems to have been an innovation of the Mughals.

Bābur mentions that, for reasons of comfort, a soft cap known as the *duwulgha burkī* was first worn on the head and over this was worn the helmet.[140]

The Bagtar[141]

It was a coat-of-mail and was worn over the *zirih*. The *bagtār* was often made of chips of metal arranged like fish scales.[142]

The Zirih[143]

Another coat-of-mail, the *zirih* (Pl. LXIV, Figs. 21-22), was made of metallic chains hinged together.[144] It had a plain high collar, was half-sleeved, and open in the front, and was generally made long enough to protect a soldier up to the knee.[145] The *zirih* worn by the cavaliers was shorter in length. It rested a little below the waist and was made with a cut in the lower part of the back. A few examples of the *zirih* preserved in the Indian museums are mentioned by Egerton.[146]

The Ṣādiqī

It was a coat-of-mail and resembled the *zirih*, only the length was different. Instead of sleeves, it had epaulettes (Pl. LXV, Fig. 1).[147]

[139]Cf. Egertan *op. cit*.

[140]"*Duwulgha burkī*; i.e., the soft cap worn under the iron helm." cf. Beveridge, *Bāb*, *op. cit*., I, p, 167, n. 2.

[141]Steingass, s.v., *bagtar*.

[142]From the figure shown in the *Ā'in* on plate XII the *bagtar* may be described as a fish-scale armour. Blochmann, *op. cit*., I.

[143]Steingass, *s.v*., *zirih*.

[144]Irvine, *op. cit*., p. 67.

[145]Egerton, *op. cit*., n. to No. 591 T, p. 125.

[146]*Ibid*., Nos. 361, 362, p. 133; No. 453, p. 112; Nos. 591, 591 T, p. 125; No. 706, p. 135.

[147]Blochmann, *op. cit*., I, pl. XIV, fig. 51.

The Joshan

This was a breast-plate, fastened on the chest with cross-straps running over the shoulders and tacked at the back. The *joshan* given in the *Ā'in* on pl. 8, fig. 48, appears to be a breast-plate, covering the chest and the stomach.[148] Blochmann has described it as an armour of the chest and body.[149] But the plates represented in the illustrations are an armour for the chest only (Pl. LXV, Figs. 13-18). A similar plate was worn on the back also. These were round, with plain or foliated edges, and were sometimes embellished with embossed floral patterns in the centre. Plates—rectangular or square—were not used frequently.

Probably, these separate pieces—plates for the chest and back—were an alternative for the *chār-āina*.[150] The latter was an armour employed to protect the chest and the back and has been mentioned by Abu'l Fazl. It consists of four plates, square or slightly rectangular, two small and two large. All these plates were connected by chains and so worn that the larger plates covered the chest and the back, whereas the smaller ones protected the sides. The side plates had a depression at the top fitting the armpit. All these plates had decorated borders and were not flat, but slightly bent inside in view of the curvatures of the chest. It must have been worn under the *bagtar*, as it is not visible to us in the illustrations. Egerton has mentioned its specimens (fig. on pl. XI, No. 764 T.).[151] Bābur also mentions a chest-guard called the *gharīchā*.[152]

The Angarkha

It was a long, wide, quilted coat and was worn over the armour. It was open in front and reached down the middle of the shin.[153]

The Rāk,[154] or the Rāg[155]

It was a leg-guard made of small plates of iron and chains and covered the whole leg right from the toe to the middle of the thigh. Thus, in one piece, it looks like a leg. This was different from the *moza yi āhanī*[156] (iron stockings) and leg-guards. The latter were not used along with it.

The Moza-yi āhanī

This was the iron sock covering the foot and the foreleg (Pl. LXV,

[148] *Ibid.*
[149] *Ibid.*, pl. XIII, No. 48.
[150] *Ibid.*, p. 118; pl. XIII, fig. 49.
[151] Egerton, *op. cit.*, pp. 103, 112, 119, 124, 144, 135.
[152] Cf. Beveridge, *Bāb, op. cit.*, I, pp. 315-16. The description of the *Gharīchā* or *Gharbīchā* given by Eriskine associates it with the *Chār-āina*. *Ibid.*, p. 315, n. 1.
[153] Blochmann, p. 118, pl. XIV, fig. 52.
[154] *Ibid.*, No. 69, fig. 56.
[155] *Ibid.*, n. to No. 69.
[156] *Ibid.*, pl. XIV, fig. 56.

Figs. 5-6). It was smaller than the *rāk*, and made of two separate pieces. The front had a shin-guard and a cover for the upper part of the foot. This was made of a sheet of metal and both of its pieces seem either cast or connected by means of hinges. The second part of the *moza-yi āhanī* comprised a guard for the calf muscles, the heel and the sole. This piece was worn separately and was hinged to the shin-guard.

The Leg-Guard

The leg-guard (Pl. LXV, Figs. 7-12) was used as an alternative to the *moza-yi āhanī* and the *rāk*. When compared to the last two, it allows for greater mobility and freedom. It was made of several plates rounded at the ends and bent about the curve of the leg, half-way above and below the knee. The back part of the leg remained bare except for straps used to bind it to the leg. An additional knee-cap was attached in the middle.

Another kind of leg-guard was a single sheet, probably of iron or brass. It covered the thigh, the knee and just a little below it. Leg-guards were of varying lengths. The shortest covered the thigh and the knee only (Pl. LXV, Figs. 7-8). The other two protected the whole, or half of, the shin-bone respectively (Pl. LXV, Figs. 9-10). The longest of its type rested below on the foot (Pl. LXV, Figs. 11). The former three were frequently used. Sometimes a chain-mail was fastened on the shin-bone as an alternative to the long leg-guard. These leg-guards could be plain or engraved with floral patterns.

The Dastwāna

It was an arm-guard composed of two pieces connected by laces or chains, the larger of which covered the hand from the wrist to the middle of the forearm (Pl. LXV, Figs. 2-4). It was worn so as to always cover that side of the hand which faced the enemy while wielding the sword. The illustration in the *Ā'in* shows an extension to this armour which covered the back of the palm.[157]

Sometimes, but this is very rare, we come across a plate, moulded in the form of an arm and used as armour (Pl. LXV, Fig. 4). It was provided with straps to fasten and was worn so that it always covered the exposed part of the arm.

ARMOUR FOR HORSES

The armour of the horse consisted of two pieces: one covering the head and the face, and the other the body.

[157]*Ibid.*, fig. 55.

The Qashqa

A single steel plate, moulded in the form of a horse's head, with holes for the ears and the eyes, was known as the *qashqa*.[158] It was tied with straps around the jaws (Pl. LXVI, Figs. 1-2). Some of the horses are shown covered with armour bearing a smaller frontlet. It protected only the top of the animal's head and left the eyes, the whole mandible and forehead uncovered. The latter type of frontlet has not been mentioned by Abu'l Faẓl. The *qashqa* described in the *Ā'in* was of the former type and had a decorative pattern engraved upon it,[159] but those shown in the illustrations are both plain and decorated. Pant has described a chain armour for the face of the horse, called *andhiyārī*.[160] But from the *Ā'in* it is evident that it was not an armour but a piece of canvas, square in shape and tied with two ends of the *kilāwa*. It was used especially for the elephants.[161]

The Kajēm

Abu'l Faẓl has included the *kajēm* in the list of arms and armours.[162] Blochmann has defined it as a mailed covering for the back of the horse.[163] In the illustration given by him, it appears to have been worn over the *artak-i kajēm*, but we do not come across such instances in the miniatures; instead, the armoured horses are invariably represented with the *qashqa* and *artak-i kajēm* only. The *kajēm* was a quilted covering, embroidered tastefully and put on the hind part of the animal. It was not armour but a part of the harness of the horse.

The Artak-i Kajēm

This was the main armour of the horse which protected the body from the shoulders to the tail, and from the back down to the chest, leaving only the legs bare (Pl. LXVI, Figs. 6-8). It was a quilted covering and seems to have been studded with embossed metallic floral patterns and made firm with nails, knobs, pinnacles and bands of chains and plates. At the base of it, a lace was usually provided—this was a decorative device. The *artak-i kajēm* was made in various forms and sizes. The first type covered the animal from the neck down to the chest, back and belly (Pl. LXVI, Fig. 6); the second left the neck bare (Pl. LXVI, Fig. 7), and the third protected only the back and the belly (Pl. LXVI, Figs. 8).

[158] *Ibid.*, No. 74, p. 119.

[159] *Ibid.*, pl. XIV, fig. 60.

[160] Pant, *op. cit.*, p. 168.

[161] "*Andhiyārī*, i.e., darkness, a name which His Majesty changed into *Ujyālī*, i.e., light, is a piece of canvas above one and a half yards square. It is made of brocade, velvet, etc., and tied with two ends to the *Kilāwa*. When the elephant is unruly, it is let fall, so that he cannot see." Blochmann, *op. cit.*, p. 135.

[162] *Ibid.*, No. 72, p. 119.

[163] *Ibid.*, pl. XIV, fig. 57.

The *Ā'in* has two forms, similar to the two former types.[164]

The Gardani[165]

This was a one-piece armour made of iron plates and chains hinged together, measuring the full length and moulded in the form of the animal's neck (Pl. LXVI, Figs. 3-4). Straps were provided to fasten it round the neck. It was made of two separate pieces, fastened on both sides of the neck with straps running about the mane and below, along the throat. The *gardani* is listed in the *Ā'in*, but Abu'l Faẓl has not described it.[166] Blochmann has wrongly taken it to be a round shield-like plate of iron attached to the neck of the horse.[167] Irvine is of the opinion that the term *gardani* is applied to horse clothings.[168] Steingass has defined it as a horse-cloth.[169]

The Chest-Armour

The chest-armour is seldom represented in the miniatures. It consisted of a metallic plate moulded in the form of the animal's chest (Pl. LXVI, Figs. 5). This armour has not been mentioned in the *Ā'in*.

ARMOUR FOR ELEPHANTS

The Mughal paintings give a detailed picture of an elephant's armour. Among these only the *pākhar* is decribed by Abu'l Faẓl.[170] It was made of steel plates and chains and consisted of two parts: one covering the head and the other the trunk. Two shapes of the armour of the trunk are shown in the paintings. One of them covers the whole trunk (Pl. LXVI, Figs. 10, 13) whereas the other covers only half of it (Pl. LXVI, Figs. 9, 11-12). Both could be made with or without the head-plate. The *pākhar* was embellished with embossed floral or geometrical motifs. A plate just below the forehead was occasionally decorated with plumes made from the tail of the Tibetan yak. In addition occasionally the head-cover had two long ears of steel. The description of the *pākhar* as the armour for a horse's body seems wrong.[171]

The armour which covered the back and the belly of an elephant resembles the *artak-i kajmē*. It was made of iron plates and chains, hinged together on a quilted covering, in one or two pieces (Pl. LXVI, Figs. 14-15). Its name is yet to be ascertained.

[164] *Ibid.*, pl. XIV, figs. 58, 59.

[165] Egerton, *op. cit.*, pl. 1, fig. 3. (The figure is copied from the original colour drawing contained in the *Ā'in*).

[166] Blochmann, *op. cit.*, p. 119.

[167] Blochmann treats it as a round shield for protecting the front below the neck where it is hung. *Ibid.*, note to No. 75.

[168] Irvine, p. 72.

[169] Steingass, s.v., *gardani*.

[170] Blochmann, *op. cit.*, p. 136,

[171] Pant, *op. cit.*, p. 268.

9 technological devices

Akbari illustrations help us to gather some knowledge about the mechanical objects and implements which were used in those times. These are represented in scenes of wars, expeditions and other activities. A general view can be had as to the nature of agricultural tools, the saddle, the stirrup, the horse-shoe, fountains, Persian wheels, various types of conveyances, bridges, firearms, astronomical objects, etc. Some of these are of interest because of their form, yet others by virtue of the demand they must have made on the technological skill of the sixteenth-century craftsmanship.

AGRICULTURAL AND GARDENING IMPLEMENTS

Scenes depicting the farmer or the gardener at work are only a few. Not all the tools used by them are, therefore, seen. A few folios[1] in the *Anwār* (Varanasi) and *Bāb* (Delhi) show the cultivators ploughing the fields. In garden scenes, labourers are shown at work with digging-implements—the spade, the shovel (*belchā*) and the *kudāl* (Pl. LXVII, Figs. 1-6).

Plough (*Hal*)

The ploughs in the illustrations resemble the present-day ones. The upper part, which is the handle-piece, is longer and seems to have been made of wood. To this is attached, at the lower end, a wooden piece at right angles,from which projects a sharp and pointed iron piece (Pl. LXVII, Fig. 10).

Spade

This was a broad, flat piece of iron to which a handle was fixed vertically (Pl. LXVII, Fig. 5), not very different from the spade now in use.

Shovel (*Belchā*)

This was made of a flat piece of iron, with a long handle fixed to it

[1] *Anwār*, ff. 61, 113 (Varanasi); *Bāb*, f. 143 (Delhi).

horizontally (Pl. LXVII, Fig. 6). It had a concave inner surface which could hold a good quantity of soil.

The Kudāl

Thehead of the *kudāl* was a long and pointed iron piece, shaped like a woodpecker's bill (Pl. LXVII, Figs. 1-3). Through the flatter end was fixed a handle. The *kudāl* was effective for digging hard and dry soil.

Besides tools, the *Bāb* (BM) depicts the method of seed sowing.[2] The farmer held a long sheet of coarse cloth folded into a bag and slung over the shoulder. He took a handful of grain and scattered it at regular intervals. This system is still in use and is known as "*beej bikhernā.*"

IRRIGATION

For irrigation (Pl. LXVII, Figs. 11-14), masonry wells with high coping were used. The water was collected in a small tank by the side of a well from which it flowed through an opening into narrow aqueducts leading to the fields. The paintings also show pullies on the wells (Pl. LXVII, Fig. 13).[3] The *Bāb* (Delhi) and *Khamsa* (BM) show the *arhat*, or *rahat* (Persian wheel) a device for raising water from the wells, represented with its lantern-wheel, pin-drum and the bucket chain made of double rope (Pl. LXVII, Fig. 14).[4] It had earthern pitchers tied between two long ropes and supported between horizontal bars which were fixed at both ends to the vertical wheel. The ropes with the pitchers moved like belts about the wheel which rotated with a horizontal shaft fixed in the hub of the wheel. The shaft was connected at the other end with a large gearwheel system, the horizontal component of which was moved by animal power. The paintings show the animals at work. Bābur too has mentioned in his *Memoirs* that bullocks were commonly used.[5] The gear is composed of a vertical crown-shaped wheel with long, pointed pegs. The other (horizontal) component is not a cogged wheel, as we have today, but a vertical drum with wooden ribs all around it. Bābur has given a graphic description of this apparatus which accords fully with the above description.[6] It seems that no improvement was made in its shape and mechanism etc., till the nineteenth century.[7] Water was raised to high level by means of the Persian wheels.[8]

[2] *Bāb*, f. 173 (BM).

[3] *Anwār*, f. 61 (Varanasi); *Bāb*, f. 314 (BM).

[4] *Bāb*, f. 122 (Delhi); *Khamsa*, ff. 65, 99, 294 (BM).

[5] *Bāburnāma*, tr. Beveridge, II, p. 486.

[6] *Ibid*.

[7] Habib, "Technological Changes and Society (13th and 14th Centuries)," Presidential address, Medieval India Section, *Indian History Congress* 1961, p. 145.

[8] Alvi & Rahman, *Fathullah Shirazi*, pp. 85-5. See *Akb*, pl. 111 (VA) where *arhats* (partly visible) are shown fixed on different heights.

Another device for bringing up water from the well was the *dhenklī*, as it is known nowadays (Pl. LXVII, Fig. 12). It was based on the lever principle. The appliance consisted of a long pole supported on a vertical beam, provided with some weight at the lower end. On the upper part of the shaft, a rope was tied to the bucket. The length of the rope was enough to reach the water. By a see-saw-like process the bucket was filled from the well and then raised and emptied on the ground. The *dhenklī* is still used for irrigation. Bābur also mentions the *charsā*: "In Āgra, Chandwār, Biānā and those parts, again, people water with a bucket; this is a laborious and filthy way. At the well-edge they set up a fork of wood, having a roller adjusted between the forks, tie a rope to a large bucket, put the rope over the roller, and tie its other end to the bucket. Every time the bucket turns after having drawn the bucket out of the well, that rope lies on the bullock-track, in pollution of urine and dung, before it descends again into the well. To some crops needing water, men and women carry it by repeated efforts in pitchers."[9] The *charsā* is still in use in some districts of Haryana and Uttar Pradesh.

In his description of Hindustān, Bābur tells us that the people had no running water in their residences and gardens.[10] He ordered the construction of huge tanks for storing water for irrigation and other purposes. In a few paintings, Bābur is shown supervising the construction of such tanks in the gardens.[11] The tanks could also be made in one piece out of a single mass of rock. These are simple in design, rectangular or square and occasionally with a fountain in the centre. The bathing-tanks were generally emptied by the buckets, though sometimes a drain with a plug-hole was constructed in the bottom to allow the water to run out quickly.[12] The tanks constructed by the side of wells also served the purpose of watering the cattle. The water of a river or a stream was also stored in tanks, from which it was channellized (Pl. LXVII, Fig. 11).

TOOLS

Mason's Tools

The miniature paintings displaying the construction of buildings represent some tools of the masons (Pl. LXVII, Figs. 7-8), such as the trowel (*karnī*) and a small hammer. The former is a flat-bladed hand-tool for spreading mortar on bricks (Pl. LXVII, Fig. 7). It had a kite-shaped, blade with one elongated end. The head of the hammer was pointed on one side (Pl. LXVII, Fig. 8). It was fixed to a small handle and used to break stones.

[9]Beveridge, *op. cit.*, II, p. 487.
[10]*Ibid.*, p. 519.
[11]*Bāb*, f. 181 (BM); pls. 40, 42 (Delhi).
[12]*Tezkereh al Vakiāt*, tr. Stewart, p. 6.

Carpenter's Tools

This was the saw, single edged, and no different from the sword we know, except that it had teeth at the lower edge and handles fixed transversely on both ends (Pl. LXVII, Fig. 9).

FOUNTAINS

Fountains (Pl. LXVII, Figs. 16-18) are shown in the gardens and palaces of kings. Their basins were rectangular or square, without ornamentation. The stem of a fountain was simple. It could have one or more spouts of varying shapes. As many as six spouts could be fixed on a single stem.[13] The water leapt 9 to 10 m from the nozzle of the fountain.[14]

HORSE-GEAR

The Zīn (*Saddle*)

The frame of the saddle (Pl. LXVIII, Fig. 1) seems to have been made of wood and curved so as to fit the back of the horse. It was padded up with felt and cotton rolls and covered with costly cloth, printed or embroidered tastefully. In their highly decorated forms, the saddles were made of gold and silver[15] and studded with precious jewels.[16] The saddle-cloth was richly embroidered with gold threads. Abu'l Faẓl says that the saddle-cloth was specially made for the purpose.[17]

The saddle used by the ladies was similar to that used by men.[18]

The Rikāb (*Stirrup*)

Leather or cotton flaps were used for stirrups (Pl. LXVIII, Figs. 2-3). The foot-rest was made of iron or wood. It was a U-shaped piece with a flat base.

The Nā'l (*Horseshoe*)

A horse in action is generally shown with one of the fore-feet turned backwards so as to expose the horseshoe (Pl. LXVIII, Figs. 4-5). The shape is not different from those used today. It must have been made of iron. The *Ā'in* tells us that horseshoes were changed twice a year.[19]

[13]*Bāb*, ff. 173, 292 (BM).
[14]*Tūzuk-i Jahāngīrī*, tr. Rogers, ed. Beveridge, I, p. 269.
[15]*Tabaqāt-i Akbarī*, tr. De, II, p. 365.
[16]*Humāyūn-nāma*, tr. Beveridge, p. 128.
[17]*Ā'in-i Akbarī*, tr. Blochmann, I, p. 413.
[18]*Bāb*, pl. 32 (Moscow), f. 314 (BM); *Tā'rīkh*, f. 7 Patna; *Akb*, f. 25 (CB).
[19]"*Nāl* or horseshoes, are renewed twice a year. Formerly eight *dāms* were given for a whole set, but now ten." Blochmann, *op. cit.*, I, p. 145.

CONVEYANCE

The Hawada,[20] *or Caukhandī,*[21] *or Chaukhandīdār*[22].

Various items used in connection with elephants are described by Abu'l Faẓl in the *Ā'in.*[23] The elephant, when driven to the battlefield, carried a *hawada*—a seat for riding—fastened on its back. The seat was generally square and large enough to accommodate four to six soldiers. It was made of wooden planks, high enough to protect a soldier sitting in it. Loops were there on both sides to fasten it (Pl. LXIX, Fig. 23). It was an uncovered seat, though sometimes it had a canopy to provide shade against the sun (Pl. LXIX, Fig. 24). The canopy rested on four thin cylindrical columns. Sometimes it was made of gold or silver. Jahāngīr has mentioned a *hawada* made of gold worth Rs 30,000.[24] The *hawada* furnished with a quilt and a bolster seems to have been used for travelling. A *shāmyāna*, supported on two poles, could also be connected to the front to provide shade, and the sides of the canopy were furnished with curtains (Pl. LXVIII, Fig. 25). A wooden case, similar to a *hawada*, was used for the soldiers to descend from the top of a hill into a valley.[25] It was provided with chains on each end, which were connected to the main chain (Pl. LXVIII, Fig. 27). It was lowered down like a bucket and could accommodate four to six men. The main chain was left loose by the men holding it at the top, so as to direct the seat downward.

The 'Imārī

The *'imārī* was a turret with a canopy for riding an elephant.[26] The seat was rectangular or hexagonal, with a canopy and sides covered with cloth.[27] The top of the canopy was flat, or conical, or dome-shaped (Pl. LXVIII, Fig. 26). The *'imārī* was a most comfortable seat and served as a sleeping-apartment during the journey.[28] Abu'l Faẓl has mentioned that several elephants provided with comfortable *'imārīs* were always kept ready at the palace.[29] When the ladies of the harem followed the emperor during expeditions, etc., they travelled in the *'imārīs*. During the hunting expeditions, too, the royal ladies watched the game from the *'imārīs* and

[20]Steingass, *s.v.*, *hawada.*

[21]De, *op. cit.*, II, p. 219.

[22]For *Chaukhandī*, see *ibid.*, pp. 333, 387. For *Chaukhandīdār*, see Rogers and Beveridge, *op. cit.*, I, p. 226.

[23]Blochmann, *op. cit.*, I, p. 134-37.

[24]Rogers and Beveridge, *op. cit.*, II, p. 79.

[25]*Tā'rīkh*, ff. 69, 122 (Patna).

[26]Steingass, *s.v.*, *'imārī.*

[27]*Akb*, f. 25 (CB), pls. 17, 11, 24 (VA).

[38]Blochmann, *op. cit.*, I, p. 138.

[29]*Ibid.*

sometimes partook of the hunt from there. Jahāngīr has mentioned in his memoirs that Nūrjahān could shoot tigers while sitting in the *'imārī*.[30]

The *Miḥaffa*

Another kind of turret, called *miḥaffa*, covered from all sides like the *'imārī*, was carried by two camels.[31] The *miḥaffa* was suspended on two poles between them. Poles were fixed lengthwise on both sides of the turret and their ends were fastened on both sides of the animal's belly. It was a sort of wooden turret, rectangular in shape. Abu'l Fazl says that it was very comfortable for travel.[32] The lexicographers have described it also as a turret in which the ladies travelled.[33]

Besides these, horse-litters were also used.[34] Ladies also travelled on saddle-horses.[35]

The Sukhāsan, or Singhāsān, or Sukhpāl (Litter)[36]

It was a rectangular seat provided with a canopy and carried on the shoulders by two or four men (Pl. LXIX, Fig. 20). These differed only in the degree of comfort provided for in each. The *pālkī* was the commonest. Both ladies and nobles travelled in litters. Those used by ladies were covered on the sides, leaving one or two windows for cross-ventilation (Pl. LXIX, Fig. 18). These were covered with wooden blinds. Seats were made comfortable with quilts, bolsters, etc. Long poles were connected to the base lengthwise on both sides. The palanquin-bearers carried it on their shoulders. They held crutches in their hands for support. The top of a crutch was provided with a wooden piece which had a depression in the middle to fit the armpit (Pl. LXIX, Fig. 21).

Litters were of varying sizes embellished with cloth bands and thread-work.

Carriages

Carriages (Pl. LXX) were used both for travelling, and carrying loads, the standard type of which seems to have been employed by the common people. Its main seat was sometimes built with side supports (Pl. LXX, Fig. 1).[37]

Another carriage, used to carry tamed leopards during hunting expeditions was identical to the former.[38]

[30]Rogers and Beveridge, *op. cit.*, I, p. 375; II, p. 105.
[31]*Akb*, pl. 11 (VA).
[32]Blochmann, *op. cit.*, I, p. 153.
[33]Steingass, *s.v. miḥaffa*.
[34]Beveridge, *Hum*, *op. cit.*, p. 20.
[35]See n. 18.
[36]For *Sukhāsan* and *Singhāsan*, cf. De, II, p. 276; for *Sukhpāl*, cf. *Akbarnāma*, tr. Beveridge, III, p. 341, n. 6.
[37]*Akb*, pl. 45 (VA).
[38]*Akb*, pl. 24 (VA); f. 155 (CB).

The carriage used for travelling purposes depicted on pl. 76 *Razm* (Jaipur) is embellished with four bent sticks over the frame, arranged crosswise for shade. In another instance on pl. 18 *Akb* (VA) it appears more ornamented and seems comfortable, but without a provision for shade (Pl. LXX, Fig. 2). Its main seat has railings all round it. All these carriages are shown to have been drawn by a pair of bullocks.[39]

The carriage depicted on pl. 17 *Razm* (Jaipur) is highly embellished and provided with a domed canopy supported on four thin cylindrical poles and side-railings all around the seat (Pl. LXX, Fig. 3).[40] The canopy seems to be an integral part of this carriage, which is drawn by a pair of bullocks.

All these carriages were almost identical in their mechanism. The whole structure was supported on a horizontal axle provided with spoked or solid wheels on either sides. Abu'l Faẓl refers to a carriage, which he calls *bahl*, which could carry many persons when used on even ground.[41] It is not known whether the carriages depicted in the miniatures are the *bahl* of the *Ā'in* or whether the latter was of a special type.

Special carriages with solid wheels were designed to carry canons.[42]

BEASTS OF BURDEN

Camels and mules were the animals of burden and were an indispensable part of camp-paraphernalia.[43] Bullocks were also employed to carry loads (f. 6, *Bāb*, BM). Camels were equally preferred for travelling.[44] Akbar rode a camel during his Gujarat expedition and covered the distance between Fatehpur and Ahmedabad in nine days.[45]

[39]The *Razm* miniatures depict horses drawing similar carriages with yokes which the painter seems to have done in conformity with the text of the *Mahā* where horses drawing the carriages in the battle-fields are repeatedly referred to. See *Razm*, pls. 34, 40, 44, 45, 49, 50, 54, 55, 59, 62, 89, 93, 95, 99, 104, 110 (Jaipur).

Abu'l Faẓl also mentions carriages drawn by horses and camels but the shape and design of such carriages are not known to us (Blochmann, *op. cit.*, I, p. 285) He further writes about a large cart drawn by an elephant (*ibid.*). But such carriages must have been used only occasionally for especial purposes.

[40]*Razm*, pl. 17 (Jaipur).

[41]Blochmann, *op. cit.*, I, 285. See also Khursheed Mustafa, "Travel in Mughal India," *Medieval India Quarterly*, III, Nos. 1 & 2, 1957, pp. 270-71 where two types of *bahl* are described. Also Alvi & Rahman, *op. cit.*, p. 16.

[42]*Tā'rīkh*, f. 62 (Patna); pl. LXIII, Fig. 5.

[43]*Akb*, pls. 24, 49, 77, 83, 88 (VA); *Tā'rīkh*, ff. 14, 42, 62, 143, 238 (Patna).

[44]*Akb*, f. 155 (CB).

[45]De, *op. cit.*, II, p. 408.

BOATS

Boats (Pl. LXXI) are quite frequently represented in the Mughal paintings. These were used for loading or unloading the camp material, crossing rivers in battles, sieges and travels. The boats were of various sizes and shapes. Commonest and simplest in form was a boat used for crossing rivers (Pl. LXXI, Fig. 3). It had a small square platform at an end. Each side gradually narrowed to a point. Seen from above, the boat appeared like a long leaf. The end was mounted with a cusped flower, or a pinnacle, or a knob, or sometimes with the head of a dragon. The boatman rowed it with a paddle.

The boats used in battles, journeys, etc., were deep and large. Both ends projected upwards—one end formed a platform, and the other end was always embellished with the head of a dragon, a bird, or an animal (Pl. LXXI, Figs. 10-12). Among them, the head of a duck, a ram or a horse was greatly favoured. The heads of animals were associated with the Islamic tradition and were considered its emblems. The serpentine necks of dragons were manifestations of Chinese influence. The boats engaged in royal services were sometimes decorated with the tufts of yaks' tails, and sometimes a flag was also fixed to the platform.

In naval engagements, boats provided with extra apartments on both sides were employed (Pl. LXXI, Fig. 5). These apartments accommodated the soldiers, and the boatmen took their positions in the belly of the boat and rowed it. The main seat, erected in the centre, had a canopy supported on four, narrow cylindrical columns.

An assembly of courtiers, nobles, etc., could be held in a pavilion erected on small columns fixed in the middle of a huge boat (Pl. LXXI, Fig. 8) The pavilion was made with side railings and was occasionally over shadowed by a *shāmyāna*. Boatmen, attendants, etc., stayed in the belly of the boat. The platform at the end could be furnished with a small room.

A boat used for a journey had a pavilion with a canopy. Double-deckers were also used (Pl. LXXI, Fig. 6). For the ladies, there were small compartments covered on the sides (Pl, LXXI, Fig. 7).

Boat bridges were constructed for crossing rivers. For this purpose, especially designed shallow, flat-bottomed boats, with one end square and the other pointed, were used (Pl. LXXI, Fig 4). They resemble the punt of today. Several such boats were placed lengthwise in a row to approach the banks of a river. They were interconnected and fastened with poles fixed to the ground on the sides of the river. On this foundation, a platform made of poles, beams covered with planks of wood, grass, clay, etc. was prepared and made firm with pegs, ropes, etc. Armies with their elephants and horses passed over the bridge. A miniature in the *Akb* (VA) depicts elephants crossing a river on a boat bridge.[46] Vessels made of the hides of cows, buffaloes, etc., called *jalehs*, were used for crossing rivers.[47]

[46]*Akb*, pls. 21-22 (VA).
[47]Stewart, *op. cit.*, p. 33. See Akb, pl. 26 (VA).

Boats were rowed with paddles or long poles, called *ballīs* in Hindustānī.[48] A paddle was provided with a flat, broad plank at the lower end (Pl. LXXI, Figs 1-2). Masts and sails were used for larger boats. Their number could vary from one to three.

The body of a boat was made of wooden planks fitted one into another. They were joined by various methods used in carpentry.[49] Miniatures display the joints based on the principle of the shiplap where 'L' shaped cuts are made on both the ends of a plank in reverse position, so as to fit with another similarly cut piece.[50] These joints were made firm by iron nails or wooden pegs. In a few instances, planks were set one upon the other (the doweling method) and hinged with small metallic bands and nails.[51]

Akbar paid much attention to the construction of boats. In Thattā alone, 40,000 vessels were always kept ready.[52] Lāhore, Shrīnagar, Allāhābād and Bengāl were the main centres of boat-building.[53] These were built for transport, sieges and trade, and their shapes and sizes varied accordingly.

In f. 504 of the *Bāb* (BM) we see Bābur's boats named differently by him, i.e., *Asāīsh*, *Arāīsh*, *Gunjāīsh* and *Farmāīsh*.[54] The *Gunjāīsh* was a double-decker large boat. Bābur ordered to set up a second platform on the top of the existing one.[55] The *Farmāīsh* was multi-purpose and was established with a *chaukhandī*.[56]

RAFTS

The Jālā, or Jhālā[57]

Besides the boats, rafts were used for crossing rivers. A raft was a flat plane made of bamboo and wooden poles fastened together like a mat (Pl. LXIX, Fig. 29). Underneath it, several skin bags called *jalehs*, distended with air, were fastened.[58] The platform had sufficient space to accommodate four to eight men. The Indus people called it the *jālā*, *shāl* or *sāl*.[59] We come across a few paintings representing Bābur sitting on

[48]Rogers and Beveridge, *op. cit.*, I, p. 67.

[49]A.J. Qaisar, "Shipbuilding in the Mughal Empire during the Seventeenth Century," *The Indian Economic and Social History Review*, V, No. 2, June 1968. See *Anwār*, f. 190 (Varanasi); *Bāb*, pl. 69 (Moscow); *Akb*, pls. 28, 38, 47 (VA).

[50]*Akb*, pl. 47 (VA); *Tā'rīkh*, f. 101 (Patna); *Bāb*, f. 504 (BM), pl. 32 (Moscow).

[51]*Akb*, pl. 48 (VA); *Tā'rīkh*, ff. 51, 103 (Patna).

[52]*Ā'in-i-Akbarī*, tr. Jarrett, II, p. 339.

[53]Cf. Qaisar, *op. cit.*; Mukerji, *Indian Shipping*, p. 147.

[54]Beveridge, *Bāb*, *op. cit.*, II, p. 663. See *Bāb*, f. 504 (BM). For reproduction see Suleiman, *Miniatures of Bāburnāma*, pl. 94 (colour).

[55]*Ibid.*

[56]*Ibid.*

[57]Rogers and Beveridge, *op. cit.*, I, p. 101; II, p. 137.

[58]Stewart, *op. cit.*, p. 109.

[59]Rogers and Beveridge, *op. cit.*, I, p. 101.

a raft.[60] It was pushed forward by several boatmen exerting pressure on the logs connected across the base. Rafts were used for crossing small rivers. In the rivers and streams in which there were rocks, a journey on a raft was considered safer than boats.[61]

Masonry bridges were erected on rivers (Pl. LXVIII, Figs. 6-7). Bridges depicted in the miniatures evidently seem to have been made on small rivers, as they are made of only two to five spans.[62] Their arches are semi-circular or like a horseshoe in shape.[63] Sometimes in place of arches, lintels have been preferred.[64]

FIREARMS

Guns appear in the scenes of war, siege and occasionally in hunting. Broadly speaking, these can be divided into heavy and light guns. The heavy guns or cannons were used in battles and sieges. The light guns were used not only in battles but also in hunting. Bābur tells us that the matchlockmen[65] took part in the battles of Khānwā and Pānīpat. He also describes the technique of manufacturing cannons.[66]

The gun was normally carried on the shoulders. There was no folding device in the middle, the whole gun being a long barrel from end to end, fitted on a one-piece wooden rest. Towards the butt, the wooden rest was thick, almost cylindrical. The forepart of it was as thin as a pipe and gradually tapered towards the end. It was used like a matchlock without a trigger. With this shape and method of use, it is quite obvious that the guns used during those times were only smaller versions of the cannon. They were cumbersome and unwieldy. The illustrations represent a few guns provided with pivoted cocks (Pl. LXIII, Figs. 1-3). It hammered the priming-pan containing some sort of material, probably a rope or cotton soaked in a combustible solution which was lighted to give a burning flame. The moment the ramrod was pressed, the cock hammered the priming pan and the balls of gunshot were shoved into the barrel through the nozzle. The *pargaz*,[67] a groove into which the ramrod was put, was made near the joining point of the barrel and the butt. Abu'l Fazl has described in detail the process of manufacturing a gun in the *Ā'in*.[68] Alvi

[60]*Bāb*, f. 333 (BM), pl. 33 (Moscow).

[61]Rogers and Beveridge, *op. cit.*, I, p. 101.

[62]A bridge of Akbar's time on the Gomti river in Jaunpur, measures 99 m. in length. There are ten arches and each pier averages 4.20 m. in thickness. Reproduced and described: Fuhrer, (ed.) Burgess, *Sharqi Architecture of Jaunpur*, pl. I, p. 20.

[63]*Tā'rīkh*, f. 163 (Patna); *Akb*, pl. 13 (VA).

[64]*Bāb*, f. 22 (BM).

[65]Beveridge, *Bāb*, *op. cit.*, II, pp. 469, 569.

[66]*Ibid.*, pp. 536-37.

[67]*Ibid.*, p. 121.

[68]*Ibid.*, pp. 120-21; see also Alvi & Rahman, *op. cit.*, p. 4, n. 16.

infers that several mechanical devices involved in the working of a cannon were the inventions of Faṭhullāh Shīrāzi—a scientist of Akbari's court. Barrels (*nāls*) were long, gradually tapering towards the end and opening like a funnel. These were embellished with floral and geometrical bands. The bottom was fixed lengthwise to the barrels. Their stocks were also ornamented. The butt and the barrel were enamelled and their ends were inlaid with gold.

Besides the various types of guns described in the *Ā'in*, the gun with seventeen nozzles fired simultaneously by one matchstick,[69] escaped the artist's notice.

The *Manjanīq* (Catapult)

It was a mechanical device to discharge darts or stones etc., based on the principle of levers (Pl. LXIX, Fig. 28). Bābur has mentioned several ways of discharging stone-missiles i.e., hurled by hand, catapults, mortars and matchlocks.[70] Of the several types of the *manjanīq*,[71] only one is represented in the *Tā'rīkh* (Patna) in f. 115. It consists of a long pole with a wooden case at the upper end and two long chains at the lower. The pole rested on a horizontal bar attached to the beams fixed vertically on the ground. When still, the upper end of the pole rested on the ground. Stones were kept inside the case. A team of men pulled the chains swiftly and thus the end provided with the box, when brought to a height, tossed the stones into the air. They fell, describing a parabolic curve at a distance. This mechanical artillery seems to have been more effective to hurl heavy stones etc., during siege. It was perhaps made in parts to make it portable. It seems that the *manjanīq* was less favoured by the Mughals. Among the numerous miniatures depicting the scene of a siege, only in one instance is it shown being employed. It passed into disuse after the use of gun powder became wide-spread.

ASTRONOMICAL OBJECTS

Sand-Glass

It was a time-measuring device and easily portable (Pl. LXVIII, Fig. 8). A miniature represents astrologers making use of it alongwith other astronomical instruments.[72] It consisted of two globular glass-bowls joined by a narrow neck. In Akbar's time it was probably an imported item.

[69]Blochmann, *op. cit.*, I, p. 119.

[70]Beveridge, *Bāb*, *op. cit.*, I, pp. 59, 109, 369-70; II, pp. 595, 617, 667, 679.

[71]Makhdoomee, "Mechanical Artillery in Medieval India," *Journal of Indian History*, XV, pt. 2, 1936, pp. 192-93.

[72]*Akb*, pl. 80 (VA).

Ring-Dial

Of the various kinds of sun-dials i.e., the masonry sun-dial and portable sun-dial, the ring-dial (Pl. LXVIII, Fig. 9) is depicted in a miniature where an astrologer is shown holding it.[73] Its dial is made of a flat, narrow band of metal provided with a hook or string at the top to hang it vertically Scales are marked on it. It was a type of common altitude-dial. The figure shown in the present painting does not provide details of markings on it. However, in another miniature, though of a later date i.e., Jahāngīr's reign, these markings are visible but here too it is not as detailed as one would have desired.[74] Incidentally, this particular painting also shows an astrolabe which must have been in use during Akbar's period also, though the Akbari paintings do not depict it.

SPECTACLES

Spectacles had come to be used but very rarely. The miniatures representing a calligrapher or a painter with spectacles belong to the last quarter of the sixteenth century.[75] However, Dikshit observes that spectacles with glass-lens were in use in India from the first quarter of the sixteenth century.[76] These were brought to India from Europe. Several records of the correspondance between the Englishmen in India, and the East India Company in England reveal that spectacles, mirrrors, glasses etc., were in large demand in India as early as AD 1600.[77]

SPINNING-WHEEL

The spinning-wheel is first pictorially represented in the miniature "Krishna lifting Govardhan" (*c.* 1590-95).[78] Habib has inferred that this device had been in use in India since the thirteenth century.

[73] *Akb*, pl. 80 (VA). See Charles Singer, *et al*, *A History of Technology*, III, p. 598, where this type is described as poke (pocket) dial or ring dial.

[74] Miniature in Naprstek Museum, Prague. For reproduction see Hajek, *Indian Miniatures of the Mughal School*, pl. 18 (colour); see also Singer, *op. cit.*, fig. 351.

[75] *Anwār*, f. 242 (Varanasi); Self-portrait (?) of Mīr Saiyid 'Alī, Louvre, No. 3.619, l,b. Latter reproduced by Stchoukine in his *Miniatures Indiennes Du Musee Du Louvre*, pl. II a.

[76] Dikshit, *History of Indian Glass*, p. 103. For a detailed description see P.K. Gode, "Some Notes on the Invention of Spectacles and the History of Spectacles in India," *Quarterly Journal of Bharta Itihasa Samshodhaka Mandal*, XXXVIII, Nos. 109-10, pp. 43-63.

[77] Cf. Dikhshit, *op. cit.*, pp. 115-23.

[78] See Welch, *Art of Mughal India*, pl. 13.

10 the common people

Even though Akbari painters were not primarily concerned with the common people, there are many miniature paintings in which they have been shown. These include shepherds grazing their sheep, goats and buffaloes in the fields, singers and dancers accompanied by their companions, saints residing in solitary places—beside a prayer-house, a river or in the hills, stable attendants giving fodder to the animals, cultivators with ploughs and bullocks, masons, water-carrierers, labourers carrying building material, bird-catchers intently crouched near the net, young girls pulling out buckets of water from a well or carrying pitchers and boatmen rowing their boats etc. All these scenes speak eloquently for the life of the common man in the sixteenth century. Not quite so common as the commoner, the royal attendants, drum-beaters, pipers and guards are persons more frequently met with.

The proximity of the people to the focal point in the miniature is determined by the nature of their functions. We have earlier discussed the position of the king and his nobles. The ordinary man, e.g., a cultivator, or a shepherd, was introduced in outdoor scenes to make the outermost circle; they were admitted either by logic of the situation or for completing the background. Only the attendant bearing the royal *chhatra* or *sāyabān* and the king's bodyguards were invariably at the centre, near the king.

More than from their dresses, the various categories of the people may be distinguished by their occupation. Ordinarily, a shepherd would be depicted with hardly anything more than a loin-cloth, but he may also be shown dressed in a *jāma*, *paṭkā* or *izār*, and wearing a pair of shoes, as on f. 44 *Bāb* (BM). The ordinary man too is a type. No discernible difference in their features distinguishes them from one another.

Exclusive paintings of the life of the common people are few.[1] Mostly they are shown performing their work, presumably for the king and, as such, are to be treated as royal servants.

BOATMEN

There is no uniformity in the dress of boatmen (Pl. LXXII, Figs. 3-4) who are shown fully clad or half-naked—a piece of cloth fastened round the

[1]*Akb*, pls. 45, 46, 86 (VA); *Bāb*, ff. 6, 173, 199, 370 (BM).

waist. The shoulder is sometimes covered with a cloth thrown over the back or tied over the head like a turban. The style of the turbans is generally the same as observed in the case of other figures. Occasionally, we come across boatmen wearing caps. A fully-clad boatman is shown wearing a short *jāma*, a short *izār*, a turban, plain or decorated, and *paṭkā*, a long piece of cloth worn like a girdle at the waist. This could be decorated with motifs. The trousers were generally short and hardly reached the knees.

FISHERMEN

They are rarely depicted[2] and are shown wearing only *langoṭās*[3] (loin-cloths). They resemble the boatmen. Like a boatman, a fisherman carried a piece of cloth on the shoulder and sometimes used it as a turban. The illustration on f. 143 *Bāb* (Delhi) also represents the technique of catching fish with a net.

SHEPHERDS

Like the boatmen, the shepherds are shown dressed either scantily, in a loin-cloth or fully in short *jāmas*, short drawers, caps and even shoes—the latter rarely.[4] The *jāma* is shorter than that worn by the gentry. The cap is high, oblong and tight-fitting. Round the base is found a lining of fur. It bears a strong resemblance to the cap that was worn by the Mongols and Iranians. When shown half-naked, there appears to be no difference between the shepherd and others of his class like the boatmen, fishermen and labourers.

WOOD-CUTTERS

A wood-cutter is the subject of a single illustration on f. 218 *Anwār* (Varanasi). He is shown dressed in a coat made of skin provided with half-sleeves and wearing short trousers and a skin-cap. Like a shepherd or a boatman, he also used a cloth-belt to fasten the coat round the waist.

CULTIVATORS

The cultivator is depicted in very few illustrations.[5] He is shown ploughing

[2]*Akb*, pl. 85 (VA); *Bāb*, f. 143 (Delhi); *Anwār*, f. 61 (Varanasi).

[3]It is a garment made of a small, narrow sheet, fastened at the waist, and passed between the legs, with one of its ends tucked at the back.

[4]*Akb*, pl. 85 (VA); *Bāb*, ff. 44, 478 (BM); *Tā'rīkh*, f. 21 (Patna).

[5]*Bāb*, f. 143 (Delhi); *Anwār*, ff. 61, 143 (Varanasi); *Khamsa*, ff. 99, 294 (BM).

a field and wearing a turban, *jāma* and *dhotī*[6] (a long cloth tied in folds round the waist, with one end carried between the legs and tucked behind). The *dhotī* resembles the *langoṭā*, and it hardly reaches the knees.

BIRD-TRAPPERS

The miniatures showing bird-trappers at work are in the four manuscripts of the *Bāb*.[7] In all these, the trappers are shown wearing a *jāma* of full length coming down to the middle of the shin-bone. It is tied with a *paṭkā* round the waist. Some trappers are wearing shoes. The method of catching the birds is similar to that which is still prevalent in India. The net is spread on the ground. The birds are attracted by the grains scattered below the net. The birds descend, unaware of the trappers hiding around, and as their legs are entangled in the meshes of the net, one of the trappers pulls the string, whereupon the loops close upon the birds' legs. An illustration (Fogg) shows an additional gadget for the purpose.[8] It is a short pole with a slightly bent head, smeared sufficiently with some sort of glue (*lāsā*, as it is nowadays called). This was used for catching a bird sitting within the approach of the stick on the bough of a tree. The trapper would emerge from his hiding-place stealthily and touch the bird with the glue which would instantly catch the feathers. An oval basket with a narrow opening was used for keeping the trapped birds (Pl. LXXII, Fig. 1).

MASONS

Masons (Pls. LXXVI—LXXVII) are shown constructing a tank in a garden, measuring the land with a rope, constructing a building or a fort. Water-carriers and labourers usually assist them in their work. The masons are seen with a turban, a short *jāma*, and short trousers. They often wear shoes, which, for their variety among the workmen, may be taken as a mark of respectability. They are shown with a *karnī* and a hammer, with a flat surface for setting the bricks in the correct position.

WATER-CARRIERS

In *Bāb* (Delhi) a water-carrier is represented half naked like the boatmen.[9]

[6]The *dhotī* or *dhautī* is an ancient Hindu costume. It was commonly worn by people of different strata. However, the fashion of wearing a *dhotī* varied with the locality, tribe and caste. See Coomaraswamy, *Catalogue of the Indian Collections in the Museum of Fine Arts, Boston*, Pt. V, p. 25.

[7]*Bāb*, f. 190 (BM), f. 45 (Delhi), pl. 22 (Moscow); "A Scattered Leaf," Fogg, (see Welch, *The Art of Mughal India*, pl. 9); *Anwār*, f. 61 (Varanasi).

[8]Welch, *op. cit.*, pl. 9.

[9]*Bāb*, pl. 42 (Delhi).

Here, he is assisting a mason, pouring water over the material to be prepared for laying on the bricks. In other instances, he is shown wearing a turban, a short *jāma*, with half or full sleeves, a pair of short trousers and shoes, along with other labourers employed in constructing a building.[10] The *Akb* (CB) represents him showering water on the ground on the occasion of Akbar's coronation at Kālānūr.[11] In the *Bāb* (Moscow) he is shown pouring water into the cupped palms of a thirsty man while on his way with his leather-bag (*mas̲hk*) to the royal bathroom.[12] (Pl. LXXIII, Fig. 2.)

LABOURERS

The labourers (Pls. LXXVI LXXVII) are shown digging the earth with spades, irrigating fields, sowing seeds, or helping a mason, or unloading the goods of the traders. Interestingly, the labourer usually wears a turban, or a cap like that of the shepherd, a short *jāma*, a short pair of trousers and sometimes, shoes. The garments are plain. The *paṭkā* is either fastened about the waist or thrown over the shoulders like a *doshāla*. Sometimes he is shown half naked, wearing only trousers and a cap or a *langoṭā*.

The half-naked bullockcart driver, represented on pl. 45 *Akb* (VA), is engaged in carrying building material. He wears a ringed turban and a *langoṭā* only (Pl. LXXVI). A piece of cloth worn around the waist could be used to cover the shoulders and the back.

PĀLKĪ-BEARERS

Pālkī-bearers (Pl. LXXIII, Fig. 3) are always fully clad in a turban, a *jāma* of full length, a pair of trousers, full- or half-length, and shoes. The waist is girdled with a *paṭkā*. Their dresses may be plain or decorated. For support, they hold a crutch in their hands.

WASHERMEN

They are seldom depicted. A turban, a *dhotī* of small length resembling the *langoṭā* and a piece of long cloth similar to a *paṭkā*, fastened loosely around the shoulders made his dress (*Razm*, pl. 140, Jaipur; *Anwār*, f. 160, Varanasi).

[10] *Akb*, ff. 1, 245 (CB), pls. 43, 45, 73, 82, 114 (VA); *Bāb*, pl. 18 (Moscow); *Tā'rīk̲h̲*, f. 58 (Patna); *Razm*, pls. 39, 86 (Jaipur).

[11] *Akb*, f. 1 (CB).

[12] Suleiman, *Miniatures of Babur-Nama*, pl. 18.

TRADERS AND SHOPKEEPERS

Traders and shopkeepers are shown carrying their goods on bullocks and camels, or sitting in a stall in a military camp. In the illustrations, it is not difficult to differentiate between the local trader and the foreign trader. Folio 6 of the *Bāb* (BM) represents a scene in a town called Kand Bādām (situated in the east of Khujand) which was famous, according to Bābur, for its fine almonds (*bādām*). The local traders are distinguished by their long, loose robes, massive turbans and long beards. The Indian merchants who have evidently arrived with their beasts of burden (bullocks) to purchase almonds are depicted with the usual *jāmas* and *paṭkās*. One of them wears a *dhotī* instead of trousers. None of them is shown sporting a beard. Another painting, representing the same scene, occurs on f. 4, *Bāb* (Delhi). In brief, the dress of the Indian trader is the same as the dress of the common people. It is simple, without any ornamentation, though we might assume that some work on the *jāma* would not have been uncommon among wealthy merchants.

MUSICIANS AND DANCERS

The musicians and dancers (Pl. LXXIV, Figs. 1, 3) represented in the miniature paintings are those that belonged to the court. They were not necessarily representative of the public performers and their costumes or dresses may or may not be taken as typical of this class of people. They are depicted in groups. The male artistes wear turbans, long *jāmas* with full sleeves, trousers of full length, the *paṭkā*, sometimes a *doshāla* and shoes. The turban and *paṭkā* are often decorated. The instruments belonging to the group of dancers include the *rubāb*, *chang*, *duf*, *ghīchak*, *tambūra*, *vīnā*, *alghozā*, *qarnā*, *surnā*, *pakhāwaj*, *naqāra*, etc. On f. 295 of the *Bāb* (BM), two dancers, a male and a female, have been shown performing a sword-dance accompanied by (besides the usual instruments) a *qarnā*, which was also used on the battlefield.

SAINTS

The *Bāb* contains illustrations of a holy place and a shrine situated in the neighbourhood of Delhi.[13] The former, in a certain town called, according to the *Bāb*, Bigrām,[14] at some distance from Kābul, represents *jogīs* doing work. Bābur did not get the opportunity to visit this place, the location of which was not disclosed by his companions because of

[13] *Bāb*, f. 199 (BM), f. 370 (Delhi).

[14] *Bāburnāma*, tr. Beveridge, I, p. 280.

reasons fraught with danger.[15] Bābur does not give any description of that place or the dresses worn by the saints. The illustration must have been composed by the artist on the basis of his observation of the life of the Hindu *sādhūs*. The drawing shows a tree, closely resembling the *peepal*-tree (banyan), which is indigenous and does not grow in Afghanistan.

The *jogīs* are shown clad in ankle-length *'abās* with no sleeves but with openings for the hands. They are mostly bare-headed and wear thick rings in the ears. Some of them are shown with a *langoṭā* tied about the waist. A couple of saints are shown with ringed headgears and apparently better-stiched gowns. The main figure sitting right at the entrance of the *maṇḍapam* in an authoritative posture appears to be the *guru*. He is shown only in a long, flowing *dhotī*. The saints represented on f. 370 *Bāb* (BM), sporting long hair and full beards, appear to be *sannyāsīs*. Generally, they were half-naked and wore only a *langoṭā*. A coarse, patched cloth was used to cover the upper part of the body. A figure shown sitting on the left side, stiching the patches and wearing a long cap, seems to be a Muslim saint.

The battle of the *jogīs* and *sannyāsīs* depicted in the paintings[16] displays various weapons wielded by them. These include the sword (*shamsher*, *khanda* and *pattā*), *trishūl*, an axe with a chisel-like head, a battle-axe, called a *tabar*, and a *chakra*. Folio 332 *Tā'rīkh* (Patna) shows the *guru* or *sanayāsīs* paying homage to Akbar who assisted the *sannyāsīs* against the *jogīs*. The *guru* is shown wearing a long flowing *dhotī*, as already observed on f. 199 *Bāb* (BM), a *doshāla* thrown round the shoulders and a crown on the head.

ROYAL ATTENDANTS

They are generally shown in the court, camps, on the battlefield and at hunting and other expeditions. Among them the guards and attendants of the court may be distinguished. The attendants performed various jobs, viz. carrying the royal-insignia, beating of the drums, helping in cooking and serving food at feasts, driving animals to the hunting-circle or managing the hunted animals.

The guards and attendants who carried the *sāyabān*, or royal umbrella, followed close upon the emperor whenever he moved out. Guards are shown dressed in turbans or caps, short *jāmas*, short trousers and shoes. They invariably use *paṭkās*. Occasionally a long, flowing, cotton muffler may be seen going from over one shoulder down about the chest in one or two rounds, and with the long decorated end casually hanging from a bent-

[15] *Ibid.*
[16] *Akb*, pls. 61, 62 (VA); *Tā'rīkh*, f. 322 (Patna).

up arm. The *jāmas* of the guards[17] seem to have been some kind of uniform. They were shorter than those worn by others, scarcely reaching the middle of the thigh, but the back was longer, like a flat tail-piece, covering the legs up to a little above the ankles (Pl. XXI, Fig. 3). Generally, a feather decorated the front or the side of their headgear which could be a turban or a cap. The guards are shown mostly equipped with weapons—a mace or a stick or a sword, but frequently a battle-axe and a dagger. The dagger is inserted in the *paṭkā* to one side, whereas the battle-axe is carried in the hand. The dresses of the attendants are different from those of the guards. They comprise the *jāmas* with full sleeves, full-length trousers, a muffler, a *paṭkā* and a turban of the common type. These may be plain or decorated. They wear shoes, though sometimes they go barefoot, as when walking on a carpet. Some sort of a gradation appears to be implied in the variation of these dresses, generally involving the length of the main piece, the presence or absence of a *muffler*, etc., though from illustrations it is difficult to make out their respective positions. (Pl. LXXV.)

The cooks represented in the feast scenes are dressed like other attendants employed in the royal service (Pl. LXXII, Fig. 2).

The attendants bearing the royal insignia in the battlefield are clad in armour, like the soliders. They wear helmets, coats of mail, arm-guards, leg-guards, etc. Often they ride horses which are also provided with armour. Drum-beaters and pipers wear no special dress. While in the battlefield, they are provided with half or full armour. The drum-beaters etc., are generally shown at a distance from the main battlefield.

Elephant-drivers are represented half-naked like the boatmen or sometimes fully clad in a short *jāma*, short trousers and a turban. The *paṭkā* is also used by them. They wielded spears etc. While in the battlefield, they were also provided with half or full armour and their animals were fully or partly clad in armour.

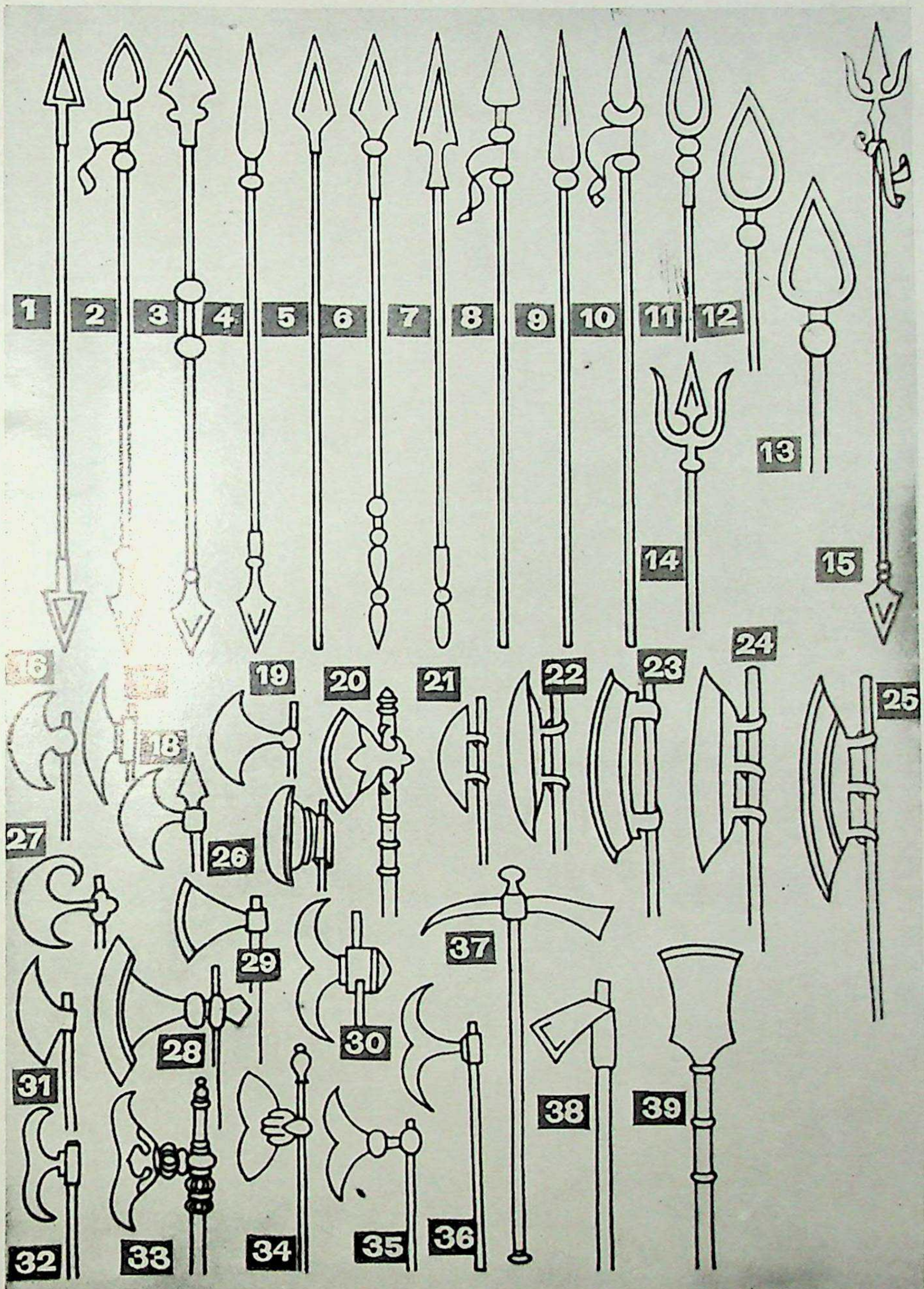
The stable-servants are rarely represented.[18] In a camp scene, they are shown giving fodder to the animals. The stable-servant could wear a short *jāma*, short trousers and a turban or cap made of skin or fur similar to those of a shepherd (Pl. LXXIII, Fig. 1).

SCRIBES

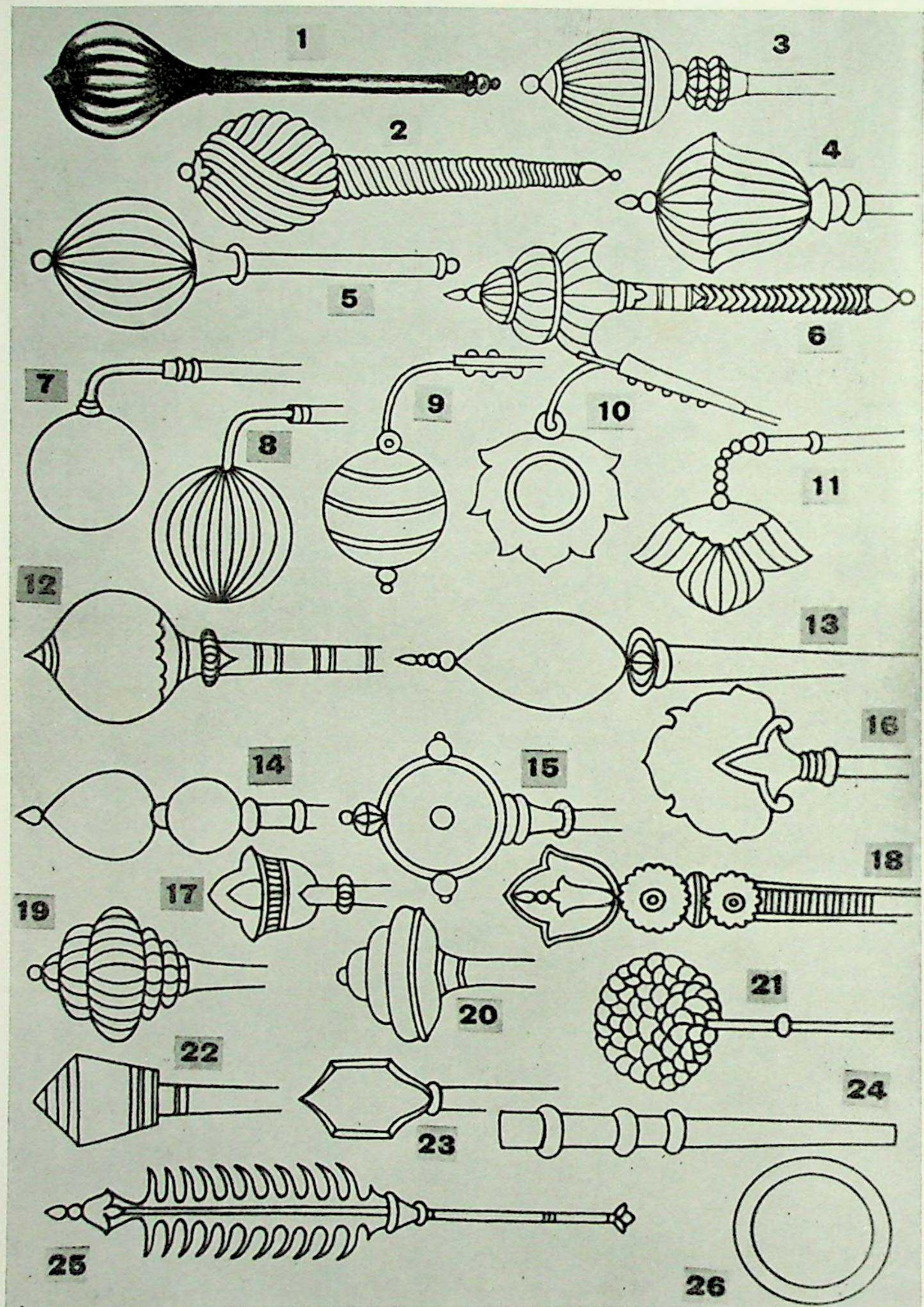
On f. 242 of the *Anwār* (Varanasi), a scribe with his helper is represented. The scribe is dressed in a long *jāma* with full sleeves, a *paṭkā* decorated with floral designs, and a turban, flat at the top. The helper is shown rubbing a paper with an agate. He wears a *jamā* fastened by a *paṭkā* on the waist and a turban similar to that of his master.

[17] *Akb*, ff. 122, 123, 147, 157, 188 (CB), pl. 84 (VA); *Bāb*, ff. 54, 80, 199, 204, 314, 468, 478 (BM).

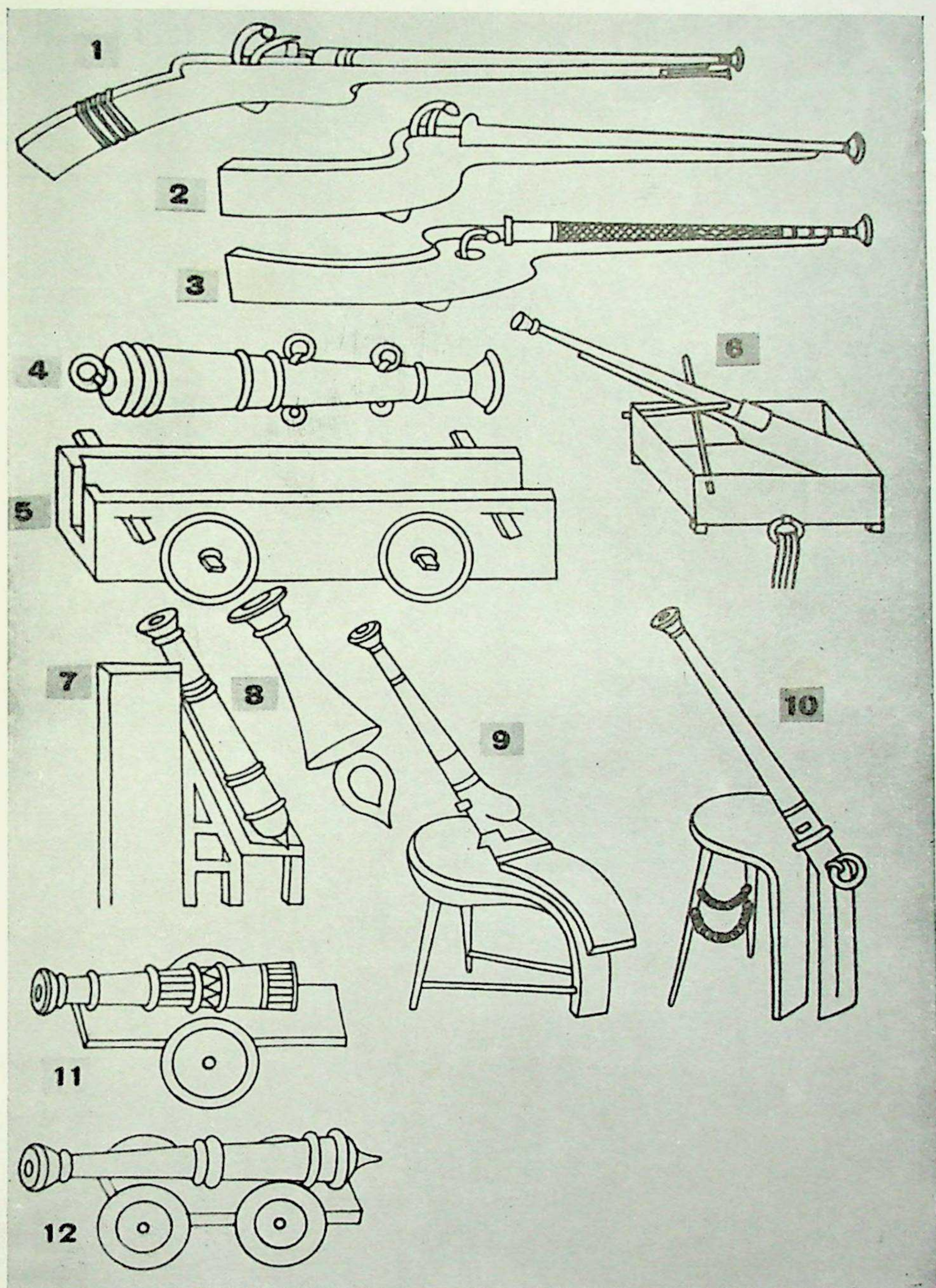
[18] *Bāb*, f. 163 (BM); *Tā'rīkh*, f. 42 (Patna).


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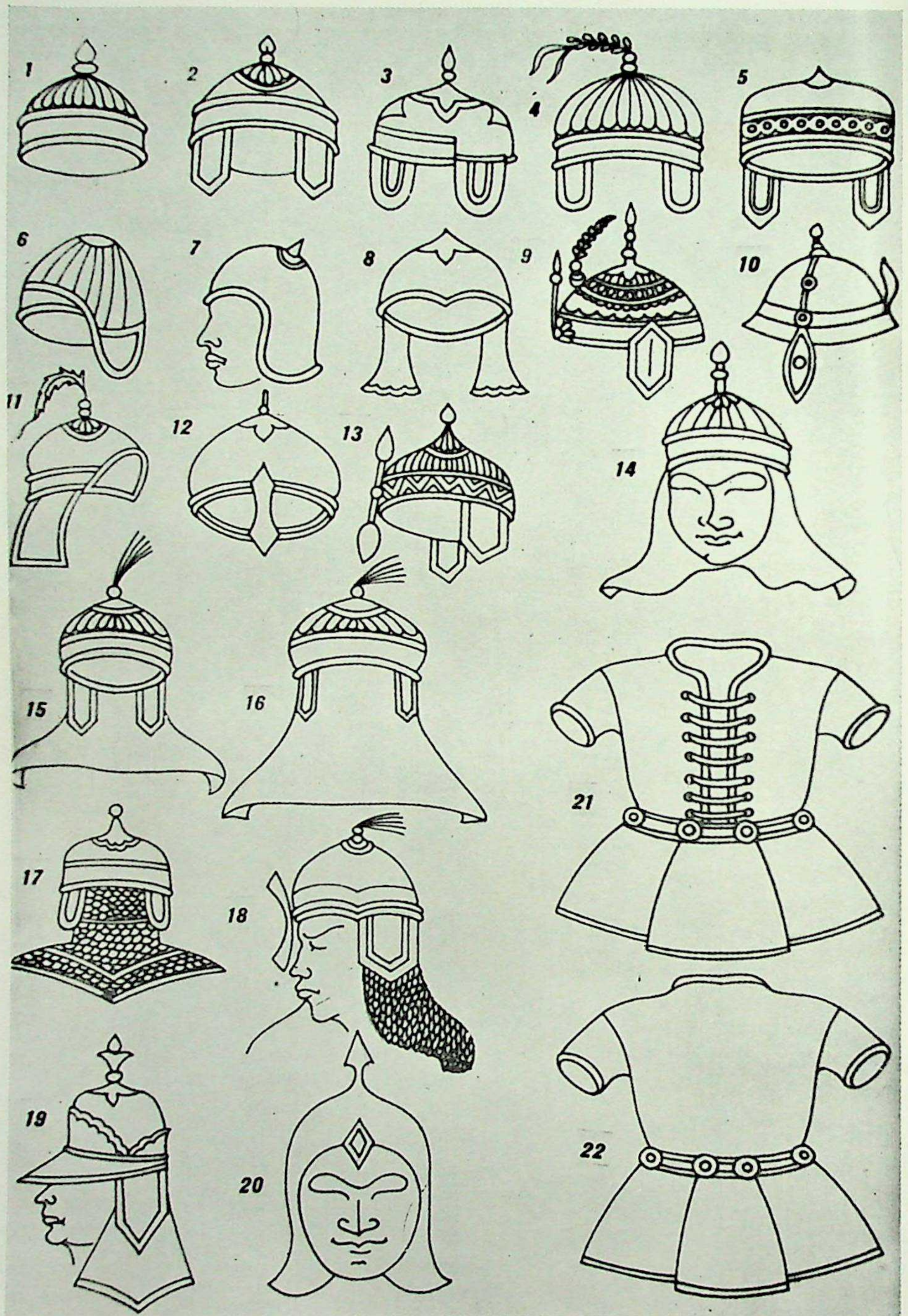
Pl. LXI



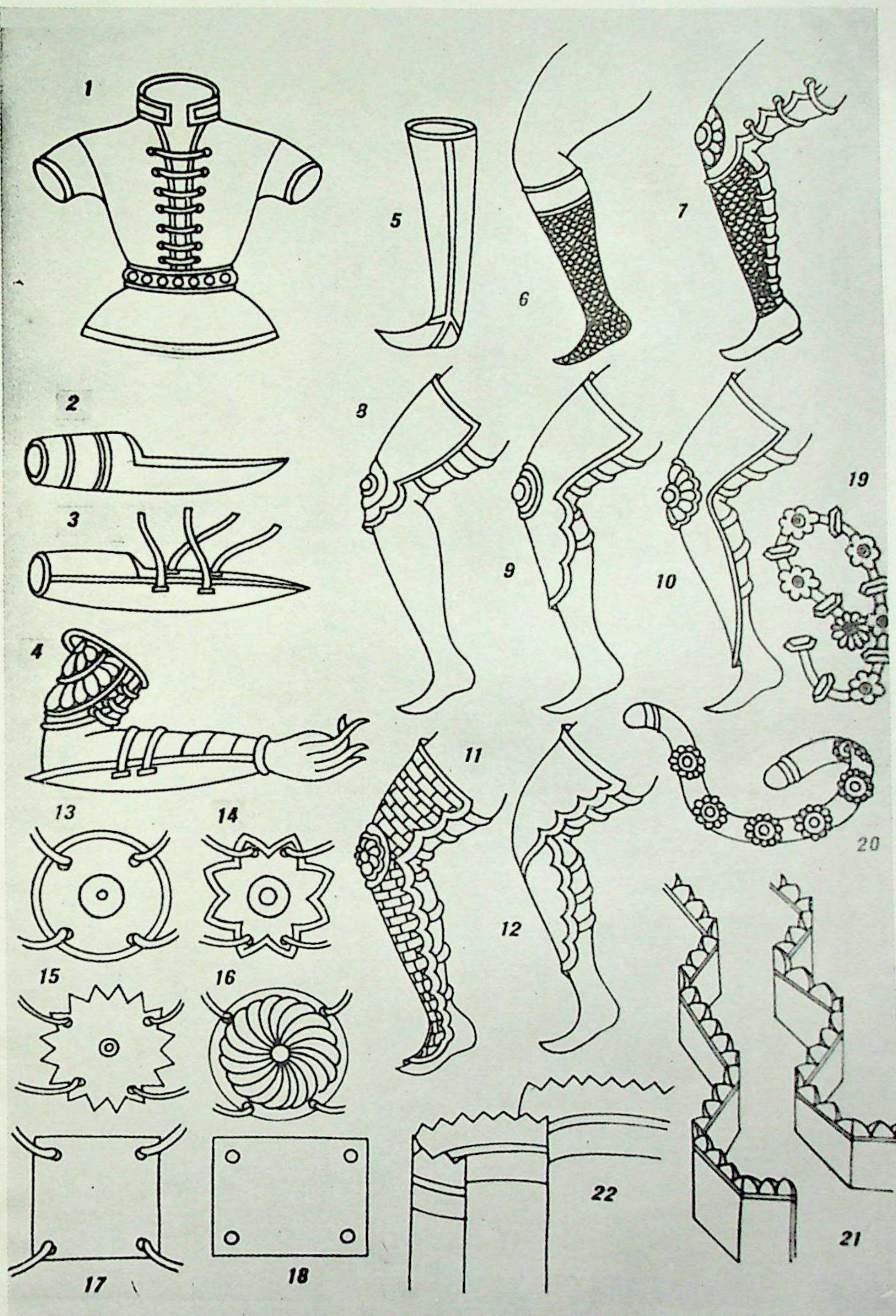
Pl. LXII



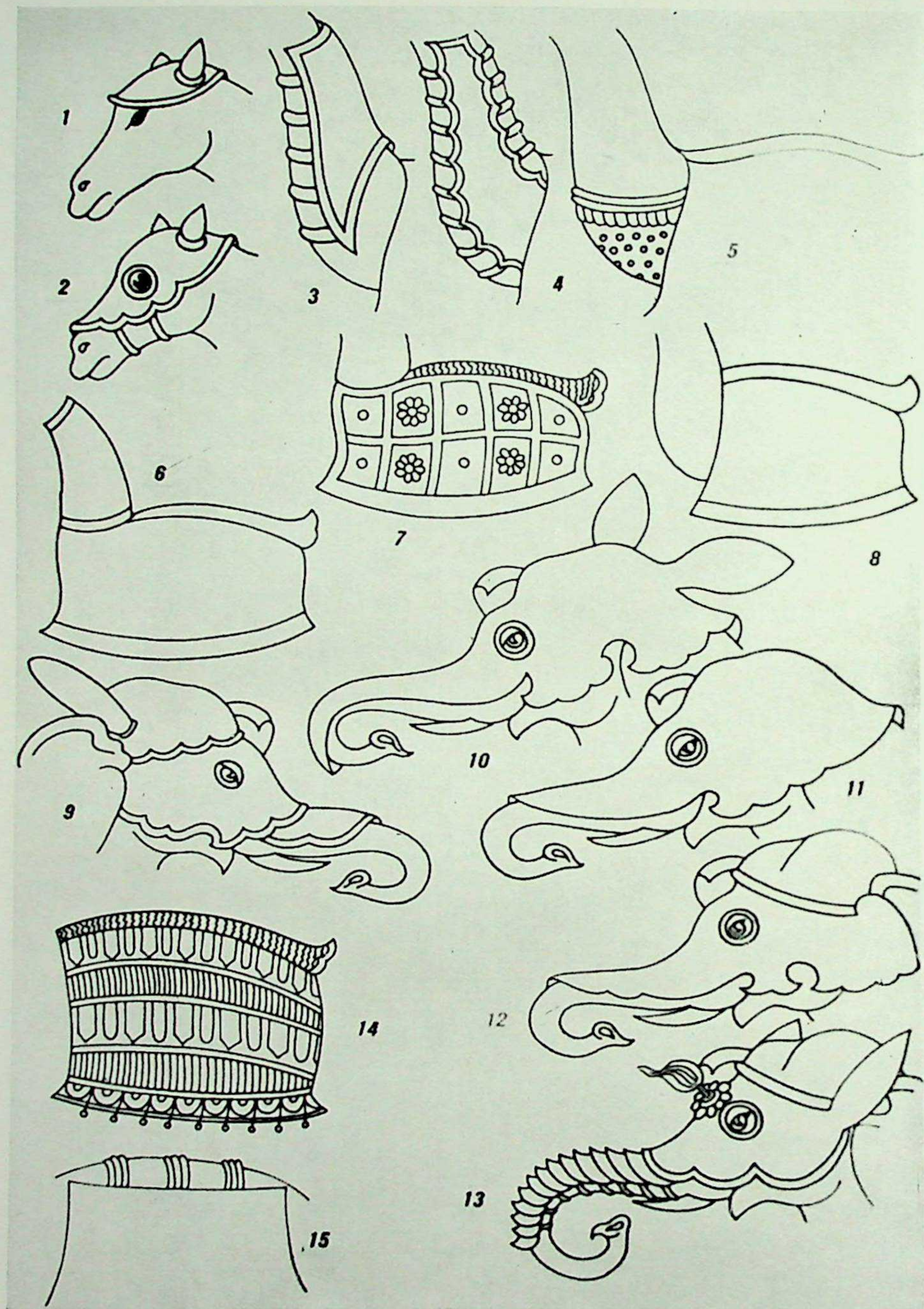
Pl. LXIII



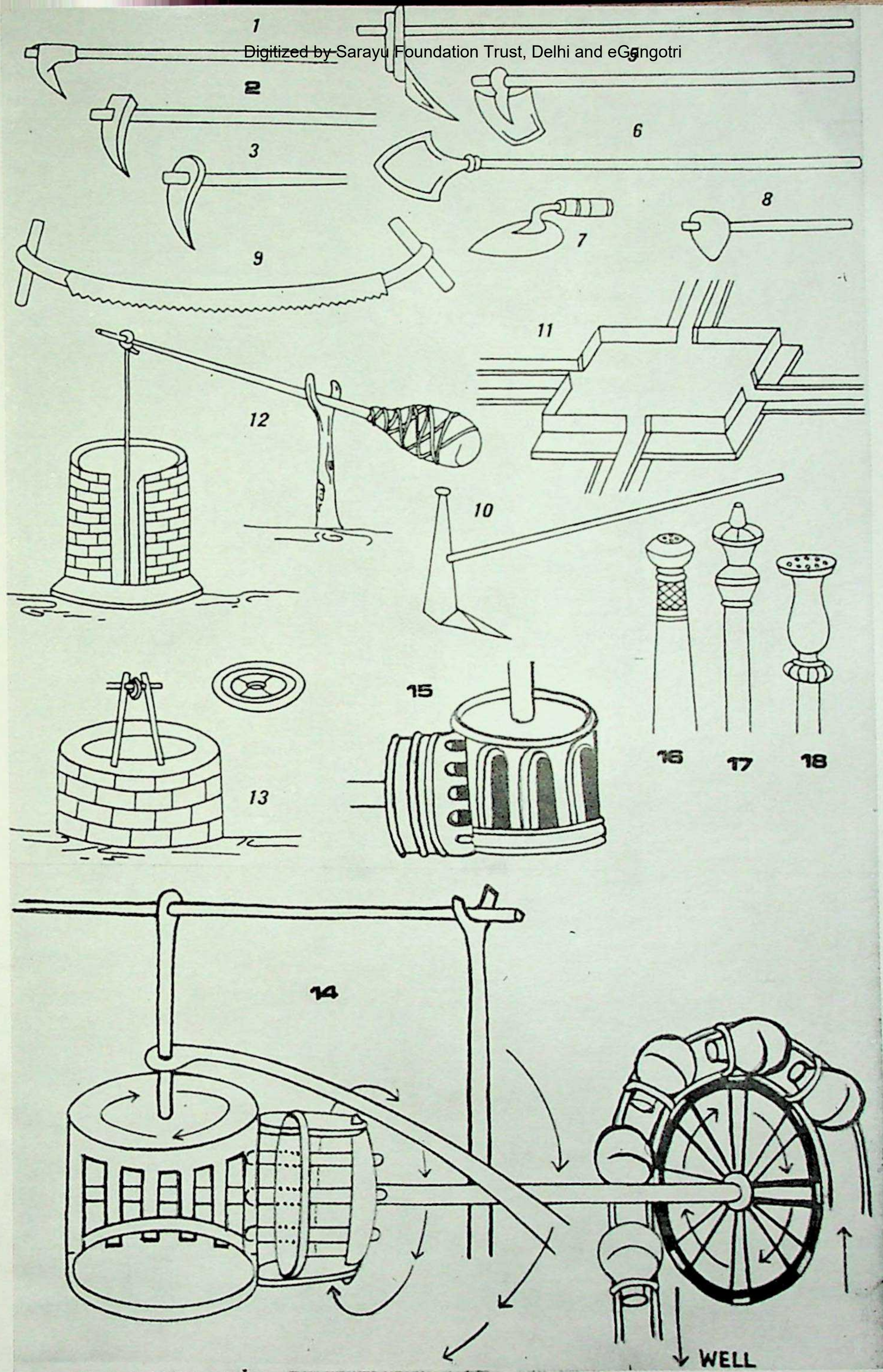
Pl. LXIV



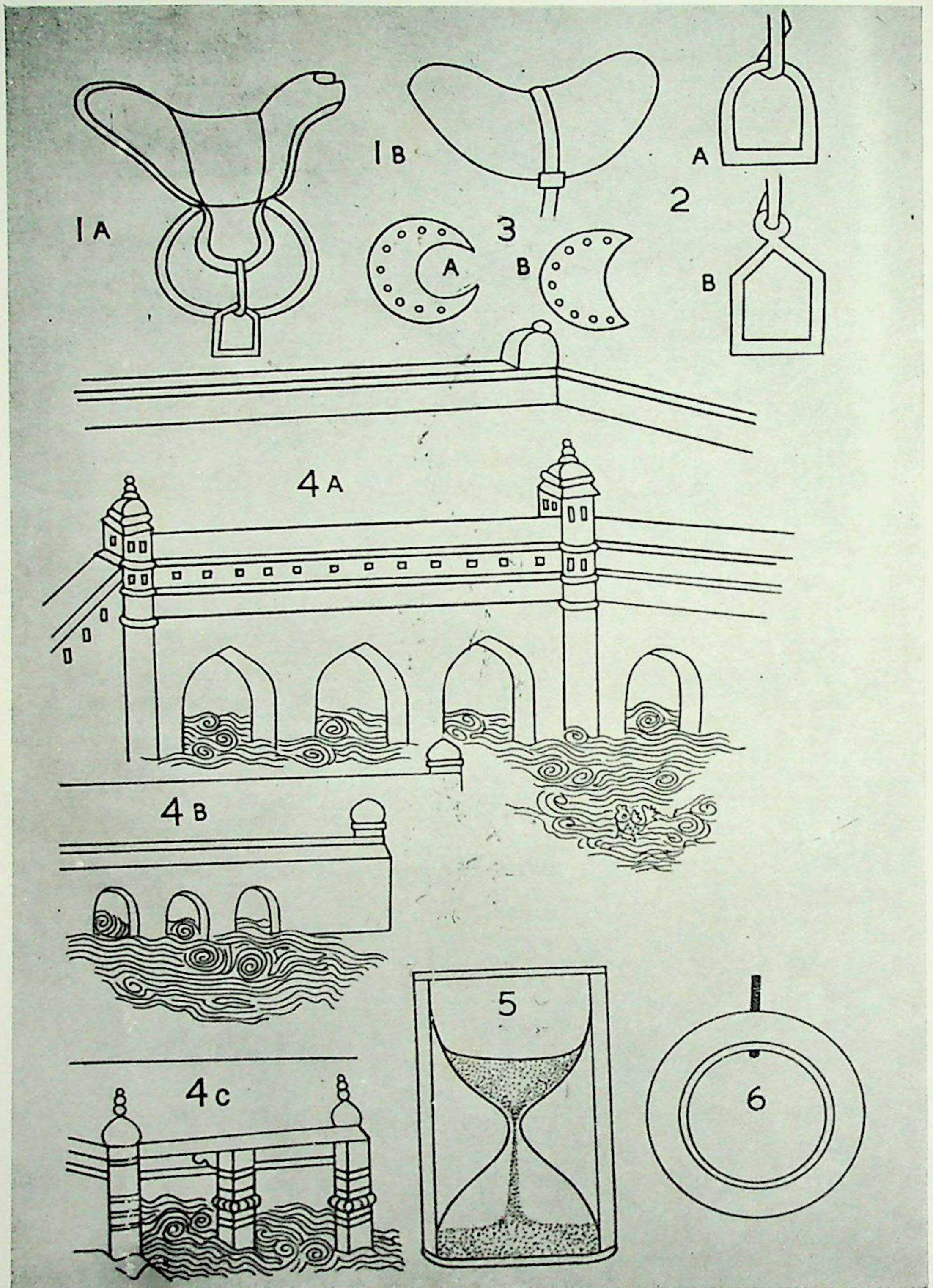
Pl. LXV



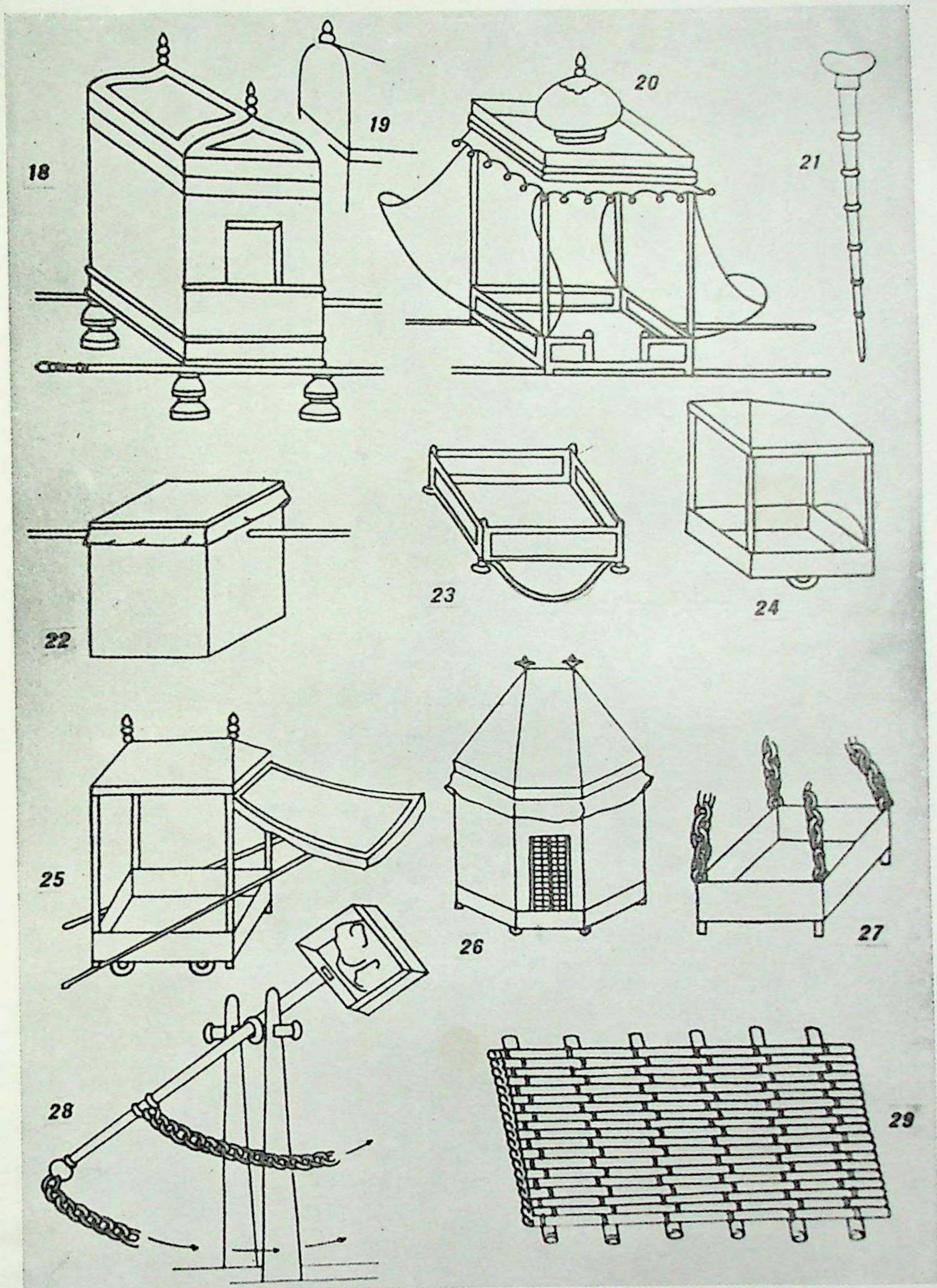
Pl. LXVI



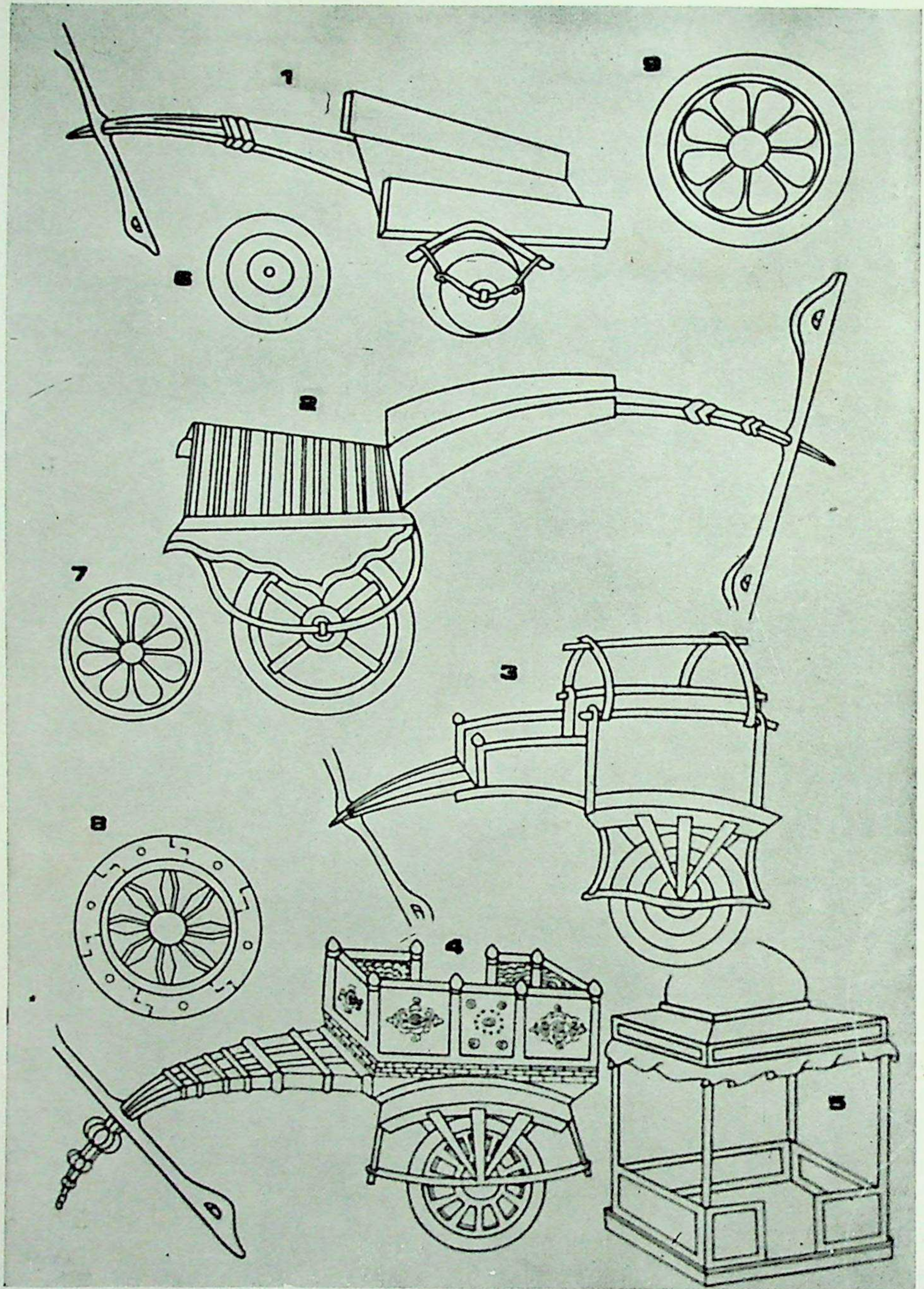
Pl. LXVII



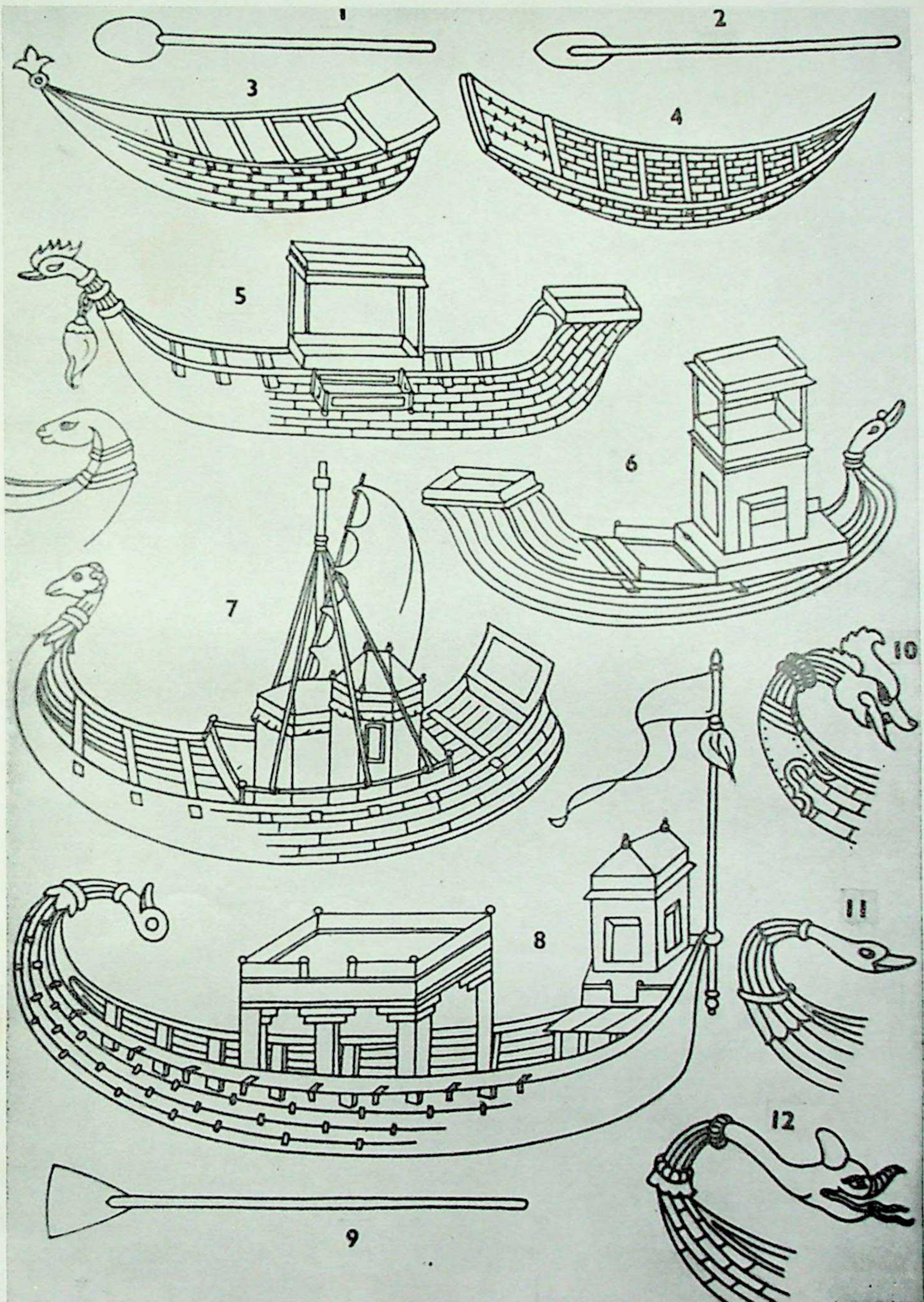
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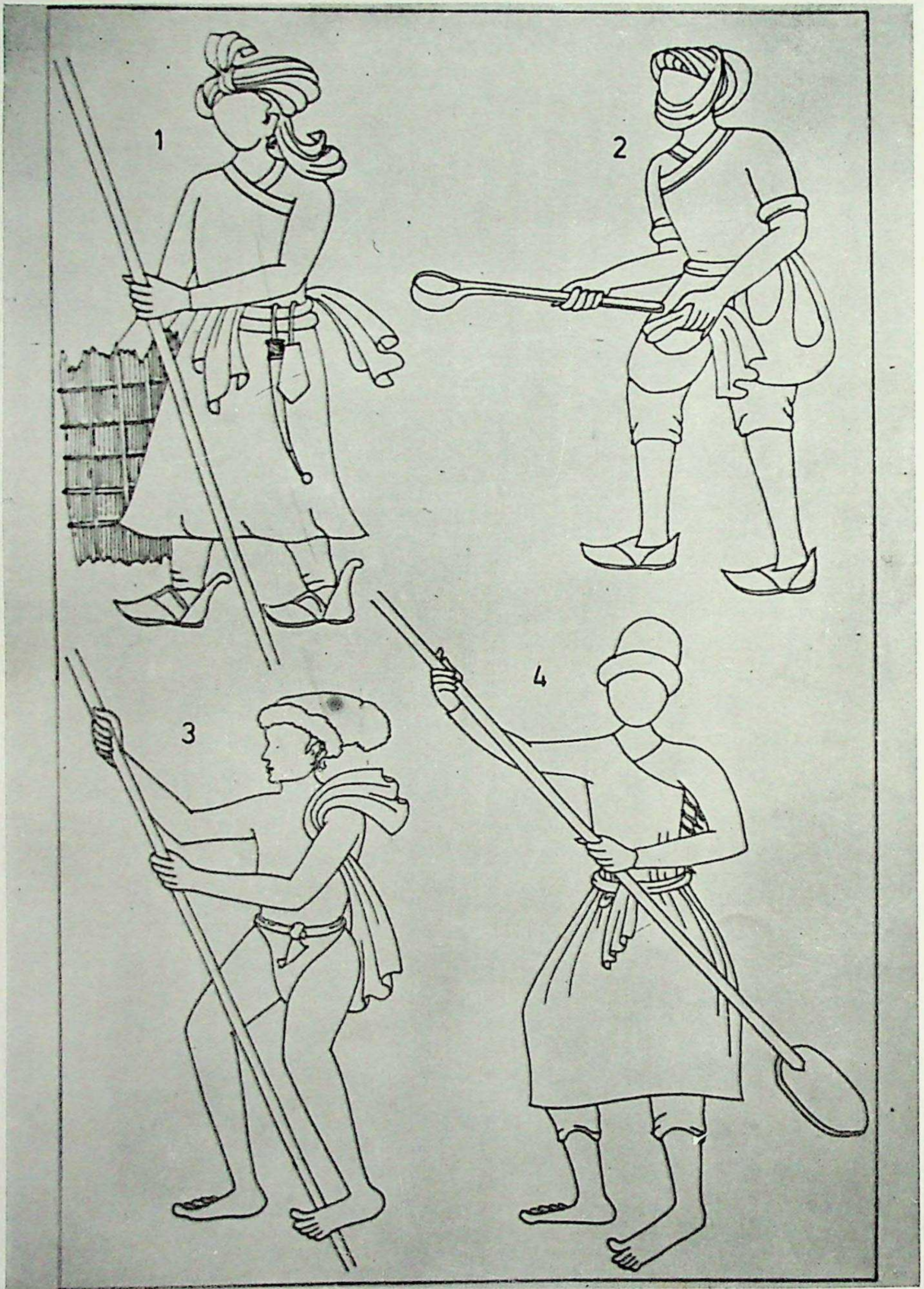
Pl. LXIX



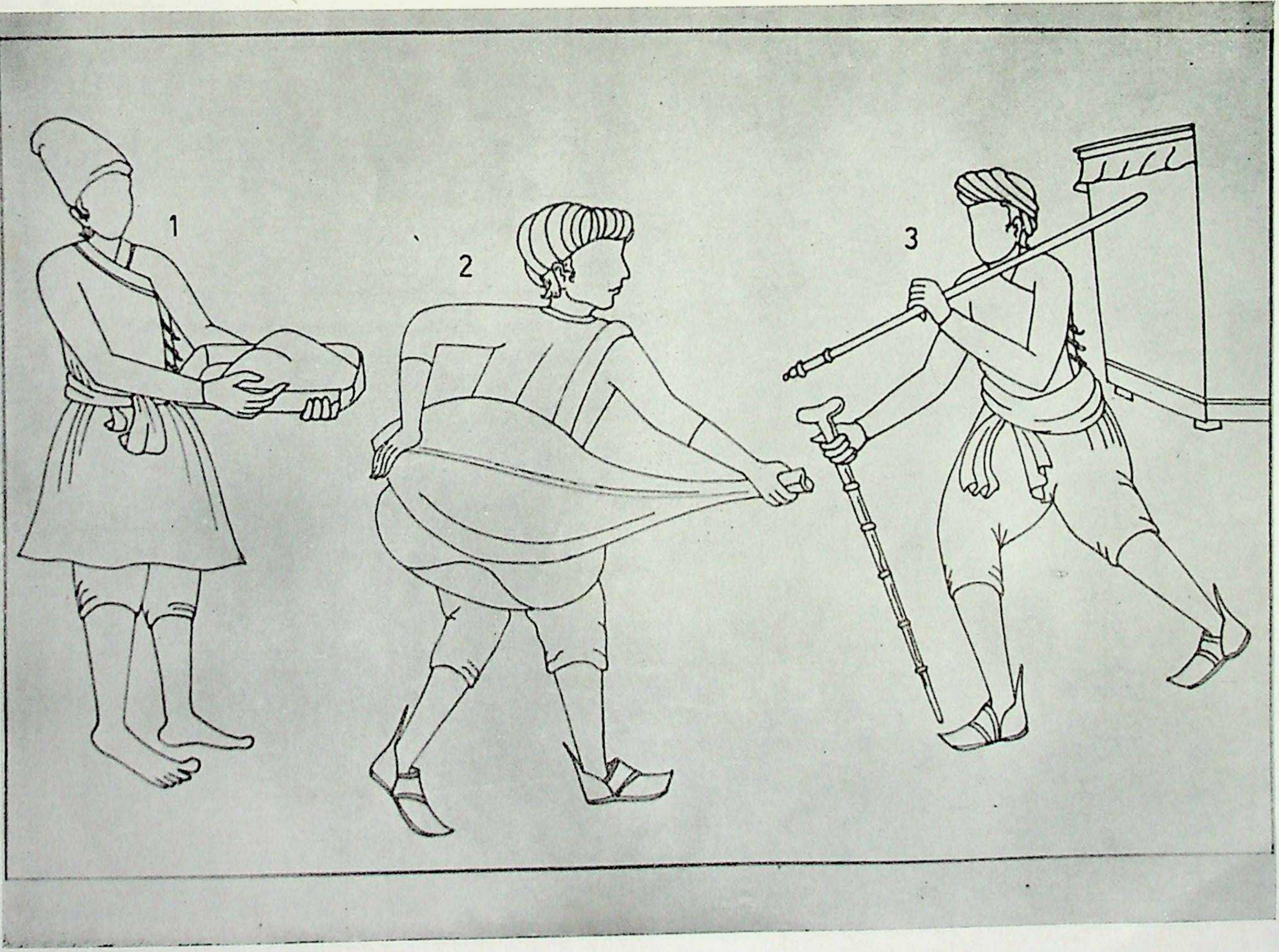
Pl. LXX



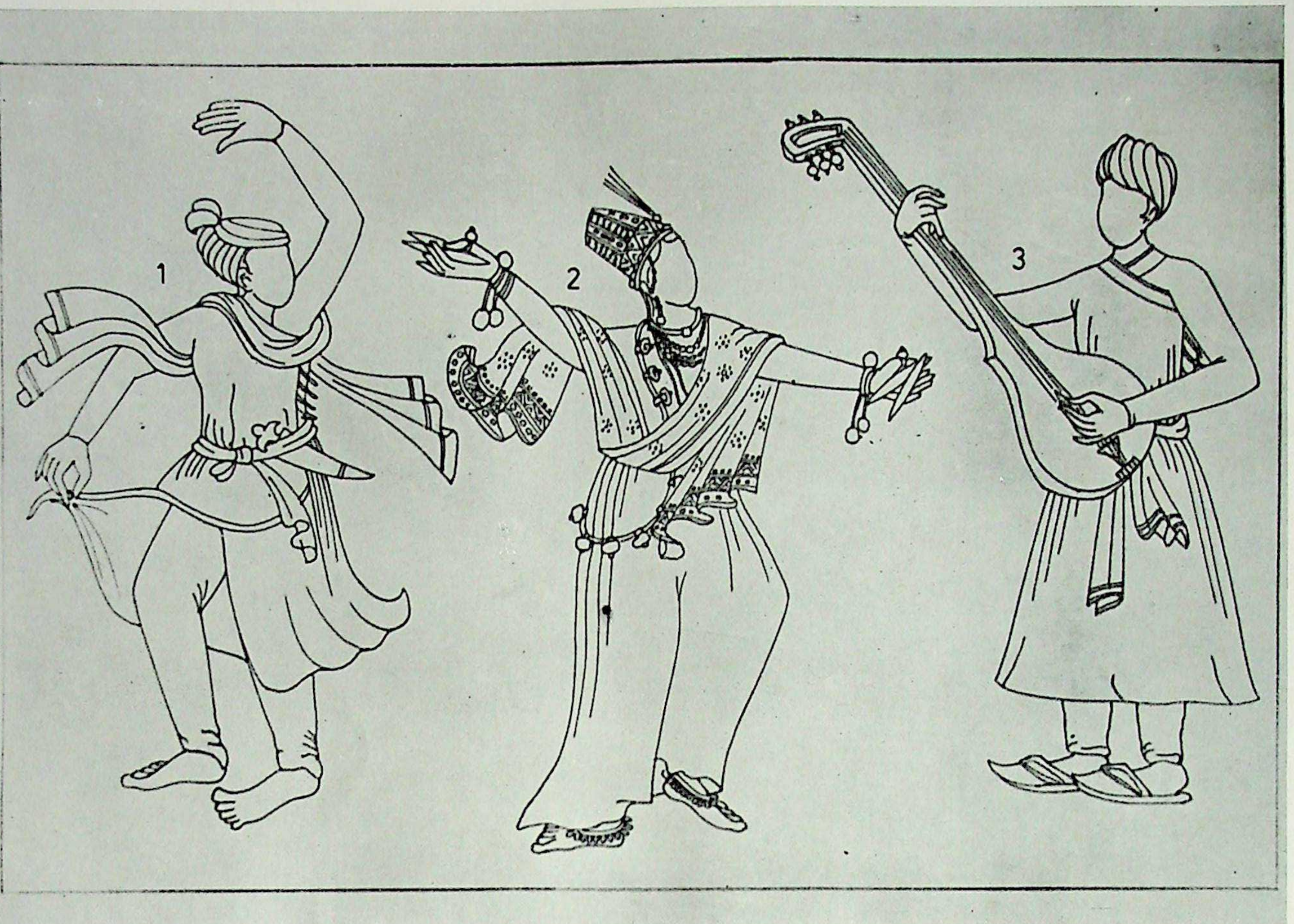
Pl. LXXI



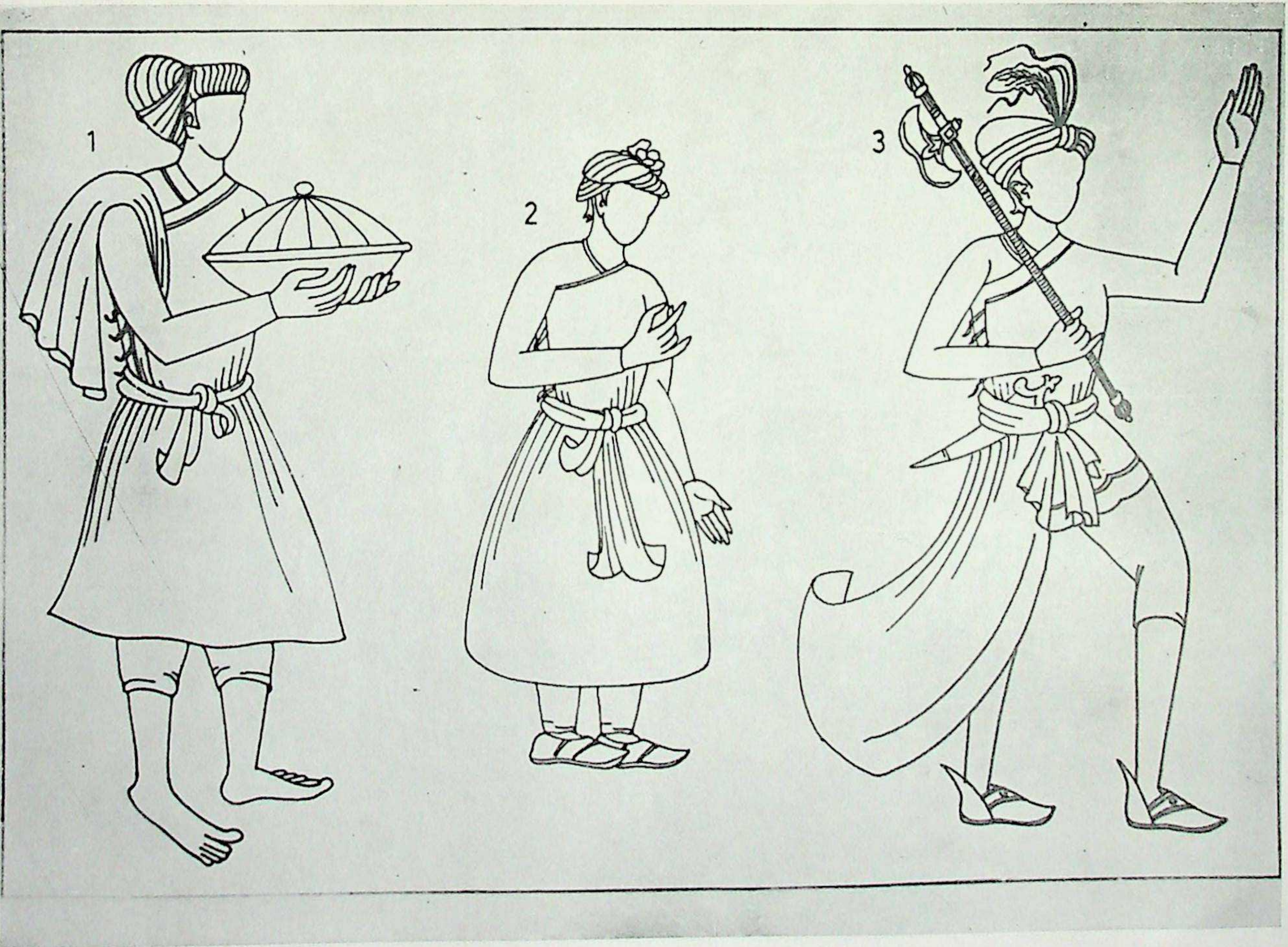
Pl. LXXII



Pl. LXXIII



Pl. LXXIV



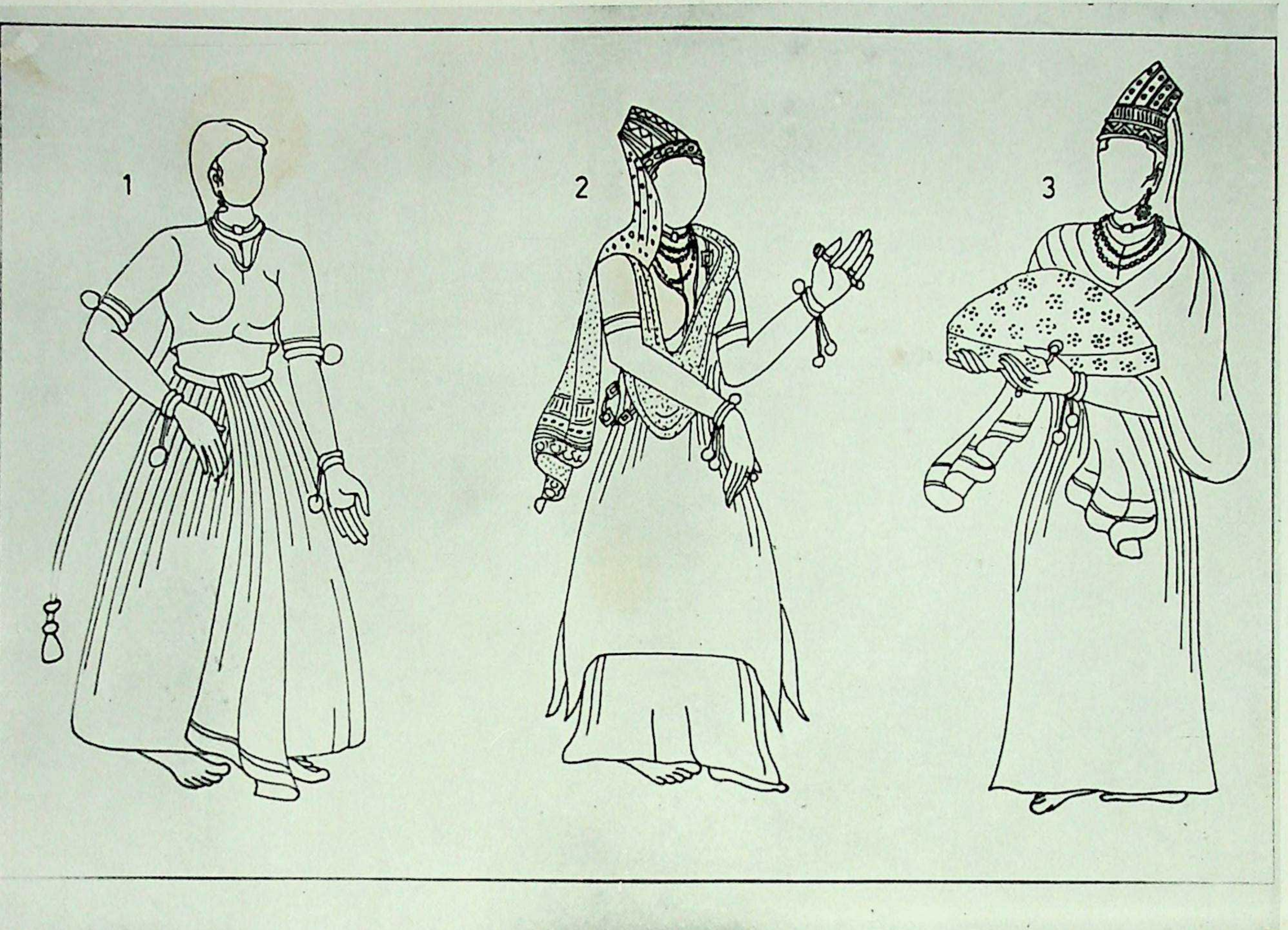
Pl. LXXV



Pl. LXXVI


باکنگره و فصیل و سنگ انداز باهتمام مخلص حقیقت پیوند قاسم خان میر بر و بحر به فرخی
و فیروزی صورت و نقش اختتام گرفت

Pl. LXXVII



Pl. LXXVIII

WOMEN

Generally court paintings concentrate on men associated with court life. The depiction of women is rare, more so in the case of ordinary women. All that we find is the depiction of some maids,[19] musicians and dancers,[20] and in one instance, the female relatives of the soldiers.[21] Their dresses are different. The dress worn by some maids may be taken as representative of the dress of common women.

FEMALE ATTENDANTS

Women attendants are shown inside the palaces in attendance on royal ladies. They follow the royal ladies in the palace or camp, and perform different functions, which include carrying the royal insignia. Their dress consisted mainly of a cap and *peshwāz*, with or without a *doshāla* or *chādar*. The caps were often decorated with designs, embroidered or printed, and sometimes with a feather or a long piece of cloth folded lengthwise.

The *peshwāz*, a long dress, was made with fitting, full-length sleeves. Till the waist, it was close-fitting. The lower part hung loosely like a skirt. The skirt with triangular ends is infrequently represented.[22] The representation of an upper garment with a round neckline, half sleeves, pleated in the middle to fit the waist and going down to the knee, seems to be a variation of the *peshwāz*.[23] The women attendants did not use the *paṭkā*. Sometimes, they wore a *qabā*. A long sheet of plain cloth was thrown over the shoulder like a shawl. Sometimes, it was used as a cross-belt. This sheet could also be used to cover the head.

Among the ornaments,[24] they wore ear-rings (*bālis*), nose-rings (*laung* and *kanthlā*) necklaces (*gulūband, hār, hāns*), cross-belts, rings, etc. Some of the ornaments, like those of the head, wrist and ankles, are not visible in the paintings as the parts of the body on which they were worn are shown covered by garments. A woman attendant could wear more than one necklace at a time, though they would be different in design and size. It is significant that the dresses of the ladies are invariably plain (Pl. LXXVIII, Figs. 2-3).

On f. 193, *Bāb* (BM) are also shown female figures, presumably related to the soldiers in a camp. These figures are not fully visible. The one in the

[19] *Akb*, pls. 55, 78, 80 (VA); *Bāb*, ff. 13, 256 (BM), pl. 1 (Moscow); *Tā'rīkh*, ff. 12, 40, 72, 241 (Patna); *Razm*, pls. 84, 89, 118, 119, 125 (Jaipur), pl. 23 (Baroda); *Anwār* f. 100 (Varanasi).

[20] *Akb*, f. 143 (CB), pls. 8, 79 (VA); *Tā'rīkh*, ff. 40, 72, 205, 284 (Patna); *Razm*, pls. 12, 121 (Jaipur); *Anwār*, ff. 5, 208 (Varanasi).

[21] *Bāb*, f. 193 (BM).

[22] *Tā'rīkh*, f. 72 (Patna); *Anwār*, f. 171 (Varanasi).

[23] *Tā'rīkh*, f. 72 (Patna).

[24] *Ā'in-i-Akbarī*, (Sir Sayyid Edition), pp. 180-1.

background sitting behind the soldier on horseback has a long covering, with folds, encompassing the head and the back, perhaps a stitched veil of which the front piece is thrown behind. The other figure is wearing a fur cap.

Female Dancers and Musicians

Musicians are shown playing on a *chang*, *alghoza*, *duhal*, *tambūr* and *awāj* to the voice of a singer. The dancers and musicians (Pl.XXIV, Fig. 2) are dressed in clothes similar to those of the women attendants. The *patkā* was not worn by them. They wore ornaments like other ladies, especially the *gulūbands*, necklaces (even five at a time) and cross-belts. In fact, ornaments were a part of the dancing-costume and were worn in profusion. *Ghungrūs* were a necessity.

The representation of Hindū women[25] is frequent in the *Razm* miniatures, which shows musicians, singers, dancers, attendants, etc. Pl. 67, *Bāb* (Moscow) displays Hindu maids (Pl. LXVIII, Fig.1). They are dressed in *cholīs*[26] (blouses) and *lahangās*[27] (long skirts). They covered their head and chest with a long, thin cloth, the like of which is nowadays known as the *dupaṭṭa*.[28] As a rule, one end of it was thrown over the head and the shoulders. Sometimes, they appear bare-headed and bare footed. They wore ornaments similar to those of other ladies. The artist made no distinction in their dresses according to their strata. The lower garment of a Hindu female dancer[29] is different from those of others of her group. She wears a *sārī* fastened tightly. One end of it is tucked behind, and the other pleated and left to hang loosely, reaching up to the middle of the thighs. Other Hindu commoners—musicians, dancers, attendants, bullockcart-driver, etc.—are depicted in *jāmas* and *dhotīs*, sometimes, replaced by an *izār*.

Bābur wrote about the common people of Hindustān in a section of the chapter devoted to the "Description of Hindustān,"[30] and along with this, we are able to get a little more information from the Akbari illustrations discussed above. The turban or cap was widely used by men and women as a necessary part of their dress. Even the boatmen, fishermen and water-carriers, who are sometimes found half-naked, seem careful about wearing headgear. The turban was more commmon than the cap. The cap was

[25] *Razm*, pls. 12, 37, 39, 72, 84, 89, 118, 119, 121 (Jaipur).

[26] A tight-fitting blouse with short sleeves and fastenings at the back. See Coomaraswamy, *op. cit.*, p. 32.

[27] It is a one-piece skirt, worn by Hindu ladies. It is made of full length with a very broad hem and usually gathered at the waist and fastened by a long string of cotton. *Lahangās* are generally represented in the Rajpūt miniatures. *Ibid.*, p. 34.

[28] The *dupaṭṭa* is a kind of scarf or shawl, worn so as to cover the upper part of the body and the head. It is more or less transparent, made of thin cloth and shorter than a *chuddar*. *Ibid.*, p. 31.

[29] *Razm*, pls. 112, 121 (Jaipur).

[30] Beveridge, *op. cit.*, II, p. 519.

mostly used by labourers, female attendants, and sometimes royal attendants. The turbans or caps of royal attendants and female dancers were distinguished from those of others by a *kalghī* sported in the centre or on one side. Of the garments of the common people, the turban, *jāma*, trousers and slippers were common, though their fashions varied. The short *jāma* was worn by men of the lower classes. The dresses of the saints, guards and traders were different. The *peshwāz* was used by ladies. Trousers of short or full length were generally used, whereas the masons, water-carriers, cooks, bird-trappers, shepherds and labourers, who worked in the garden, fields, etc , wore short ones. The *paṭkā* was in common use among them. The boatmen, fishermen and labourers carried a piece of cloth like a *paṭkā* and used that sometimes as a headgear or threw it over the shoulders. The *paṭkā* was generally used by royal attendants. Women attendants, lady dancers or musicians always used a *doshāla*, or a *chuddar*. Slippers were worn by men only. Saints, boatmen, fishermen and sometimes labourers walked bare-foot. Ornaments were rarely worn by men.

It appears that the masons, musicians, dancers, traders, shopkeepers and scribes were better dressed than the water-carriers, boatmen, labourers, wood-cutters and fishermen—a mark of comparative prosperity. The royal attendants, guards, women attendants, female dancers and musicians had to keep themselves in a presentable condition and so are always distinctively dressed.

appendix

PAINTERS OF THE MUGHAL SCHOOL UNDER AKBAR

'Abdullāh: *Bāb*, BM; *Jāmi*, Teheran, Louvre.
'Abdu'ṣ-Ṣamad, '*Shīrīnqalam*': *Ā'in-i Akbari*, I, p. 114; *Akbarnāma*, III, p. 321; *Murqq'a*, Teheran; *Khamsa*, BM; *Dārāb*, BM, Ardeshir Collection, Bombay.
Aḥmad: *Akb*, CB; *Bah*, BL.
Aḥmad Kashmīrī: *Razm*, Baroda; BM (OR. 1,2076).
Ālam: Indian Museum, Calcutta; Wantage Collection, VA.
'Alī: *Tā'rīkh*, Patna.
'Alī Qulī: *Khamsa*, Walters Art Gallery, Baltimore (W. 624).
Allāh Qulī: *Bāb*, Delhi.
Amīr Beg: poetic pen-name, *Payrawī*: *Ā'in-i-Akbarī*, I, p. 670.
Anant: *Tā'rīkh*, Patna; *Anwār*, Varanasi; '*Iyār*, CB; *Akb*, CB; *Bāb*, Delhi; *Jāmi*, Teheran.
Anīs: *Razm*, Jaipur.
Āsī: *Ta'rīkh*, Patna; *Akb*, VA; *Bāb*, Delhi; *Khamsa*, BL.
Āsī *Kahār*: *Bāb*, Delhi.
Bābū: *Razm*, Jaipur.
Bābū *Naqqāsh*: *Akb*, VA.
Bābū *Ustād*: *Bah*, BL.
Bahasan: *Razm*, Baroda.
Bākir: '*Iyār*, CB.
Bālchand: *Bah*, BL; *Akb*, CB; *Nafāhat ul Uns*, BM.
Bālchand *Awwal*: *Nafāhat*, BM.
Bāndī: *Razm*, BM; *Jāmi*, Teheran; *Bāb*, Delhi; *Akb*, VA.
Bāndī the Elder: '*Iyār*, CB.
Banwālī: *Tā'rīkh*, Patna.
Banwālī the Elder: *Tā'rīkh*, Patna; *Akb*, VA.
Banwālī the Younger: *Tā'rīkh*, Patna; *Akb*, VA.
Banwārī: *Razm*, Jaipur; *Akb*, VA; *Shāhnāma*, BM.
Banwārī the Elder: *Dārāb*, BM; *Tā'rīkh*, Patna; *Bāb*, BM.
Banwārī the Younger: *Tā'rīkh*, Patna; *Bāb*, BM; '*Iyār*, CB; Bāb, Delhi; *Jāmi*, Teheran.
Basāwan: *Ā'in-i-Akbarī*, I, p. 114; *Dārāb*, BM; *Bah*, BL; *Razm*, Jaipur; *Tā'rīkh*, Patna; *Anwār*, Varanasi; *Jāmi*, Teheran; *Akb*, VA; *Tā'rīkh-i Alafī*, Washington, Louvre; *Murqq'a*, Teheran.
Bhāg: *Bāb*, Delhi.
Bhagwān: *Dārāb*, BM; *Razm*, Jaipur; *Tā'rīkh*, Patna; '*Ajā'ib*, CB; *Akb*, VA; *Bāb*, BM; *Bāb*, Delhi; *Jāmi*, Teheran.
Bhagwatī: *Shāhnāma*, BM (Add. 18,801).
Bhawāni: *Bāb*, BM; *Bāb*, Delhi; *Akb*, VA: *Razm*, Baroda.
Bhīm: *Akb*, Teheran.

Bhīm Gujarātī (or Bhīmjīu): *Tā'rīkh*, Patna; *Bāb*, BM; *'Iyār*, CB; *Khamsa*, BM; *Jāmi*, Teheran.
Bhūrā: *Dārāb*, BM; *Razm*, Jaipur; *Tā'rīkh*, Patna; *Akb*, VA; *Bāb*, BM; *Bāb*, Delhi; *'Ajā'ib*, CB; *Khamsa*, BM.
Bihzād: *Dārāb*, BM; *Tā'rīkh*, Patna.
Bīlāl: *Razm*, Messrs Maggs' Catalogue, No. 452 (1924).
Bīshandās: *Bāb*, VA; *Jog-Bashisht*, CB.
Brahspat: *Tā'rīkh-i Alafī*, Washington.
Brīs: Jean Pozzi Collection.
Bulāqi: *Razm*, Baroda; *Murqq'a*, Teheran.
Būndi: *Tā'rīkh*, Patna.
Chatar: *Dīwān*, Rampur; *Akb*, VA.
Chatarmuni; *Tā'rīkh*, Patna; *Akb*, VA.
Chatarmunī: *Tā'rīkh*, Patna; *Akb*, VA.
Chatrā: *Tā'rīkh*, Patna.
Chatarbhuj: *Dārāb*, BM; *Razm*, Jaipur.
Chitrā: *Razm*, Jaipur.
Dārā: *Razm*, Jaipur.
Daswant: *Ā'in-i Akbarī*, I, p. 114; *Akbarnāma*, III, p. 651; *Razm*, Jaipur; *Tā'rīkh*, Patna; Ardeshir Collection, Bombay.
Dāud: *Jāmi*, Teheran.
Daulat: *'Iyār*, CB; *Akb*, CB; *Nafāhat*, BM; *Khamsa*, BM; *Bāb*, Delhi.
Devjī Gujarātī (or Devjīu, or Devjī): *Tā'rīkh*, Patna; *Bāb*, BM; *Bāb*, VA.
Dhannū: *Dārāb*, BM; *Tā'rīkh*, Patna; *Razm*, Jaipur; *Bāb*, BM; *Akb*, VA; *Jāmi*, Teheran, Collection of H.H. The Maharaja of Jaipur.
Dhanrāj: *Bāb*, BM; *Akb*, CB; *Jāmi*, Teheran; *Khamsa*, BM.
Dhanwān: *Lailā-e Majnūn*, India Office Library, London.
Dharamdās: *Dārāb*, BM; *Tā'rīkh*, Patna; *Anwār*, Varanasi; *Akb*, CB; *Bāb*, Delhi; *Akb*, VA; *Khamsa*, BM; *Jāmi*, Teheran.
Dharamdās Nandā: *Bāb*, Delhi.
Dharamdās Tunrāh: *'Iyār*, CB.
Durga: *Bāb*, VA.
Emād (or Imād): *Bah*, BL.
Faqirullāh: BL (MS. Ouseley, Add. 170).
Farrukh: *Akb*, VA; *Akb*, CB; *Khamsa*, Baltimore (No. 10.624); *Akb*, BM; *Jāmi*, Teheran.
Farrukh, the Elder: *Tā'rīkh*, Patna.
Farrukh, the Younger: *Dārāb*, BM.
Farrukh Beg: *A'in-i Akbarī*, I, p. 114; *Akbarnāma*, III, p. 714; *Dīwān*, Rampur, Collection of M. Vever, Paris; *Akb*, VA; *Murqq'a*, Teheran, Wantage Collection, VA, Washington, Louvre.
Farrukh Chela: *Dīwān*, Rampur; *Razm*, Jaipur; *Tā'rīkh*, Patna; *Anwār*, Varanasi; *Khamsa*, BM; *Bāb*, BM; *Bāb*, Delhi.
Fattū: *Bāb*, Delhi; *Razm*, Baroda.
Fazil: *Rām*, Washington.
Firoz: *Razm*, Baroda.
Ghulām 'Alī: *Razm*, Jaipur, Calcutta.
Ghulām Ikhlās: BL (MS. Ousely Add. 173).
Ghulām Nabī: *Razm*, Jaipur.
Govardhan: *Rām*, Washington; *Akb*, CB; *Akb*, BM.
Govind: *Bāb*, BM; *Jāmi*, Teheran.
Govind Shankar; Johnson Collection, London.
Gang (?) Singh: *Tā'rīkh*, Patna.
Ḥaider Kashmīrī: *Tā'rīkh*, Patna.
Harānand: *Akb*, BM.
Harī: *Dārāb*, BM; *Akb*, VA.
Haribāns: *Ā'in-i Akbarī*, I, p. 114; *Jog-Bashisht*, CB.

Ḥasan 'Alī: *Razm*, VA.
Ḥāsim: *Khamsa*, Staatisbibliothek, Berlin.
Ḥāzi: *Razm*, Baroda.
Ḥabshī: *Razm*, Messrs Maggs' Catalogue, No. 452 (1924).
Ḥusain *Chela*: *Bāb*, Delhi.
Ḥusain *Naqqāsh*: *Tā'rīkh*, Patna; *Bāb*, BM; *Akb*, VA; *Khamsa*, Baltimore, (W. 624).
Ibrāḥīm: *'Iyār*, CB; *Bāb*, Delhi.
Ibrāḥīm *Kahār*: *Dārāb*, BM; *Bāb*, Delhi; *Akb*, VA.
Ibrāḥīm Kashmīrī *Dārāb*, BM.
Ibrāḥīm Lāhorī: *Dārāb*, BM.
Ibrāḥīm *Naqqāsh*: *Bāb*, BM.
Ikhlās: *Akb*, VA; *Bah*, BL, Louvre.
Ināyat: *Akb*, VA; *Akb*, CB.
Ināyat *Khana-zād*: *Akb*, CB.
Isar: *Tā'rīkh*, Patna.
Iqbāl: *Dārāb*, BM; *Razm*, Jaipur.
Iqbāl *Naqqāsh*: *Bāb*, BM.
Jagan: *Ā'in-i Akbarī*, I, p. 144; *Dārāb*, BM; *Razm*, Jaipur; *Tā'rīkh*, Patna; *Akb*, VA.
Jagannāth: *Tā'rīkh*, Patna; *Anwār*, Varanasi; *Bāb*, BM; *Akb*, VA; *Khamsa*, BM.
Jagjīwan: *Razm*, Jaipur; *Tā'rikh*, Patna; *Akb*, VA; *Razm*, Baroda; *Jāmi*, Teheran.
Jagjīwan the Elder: *Tā'rīkh*, Patna; *Jāmi*, Teheran.
Jamāl: *Bāb*, Delhi.
Jamshad: *Jāmi*, Teheran; *Razm*, Baroda.
Jamshed *Chela*: *Bāb*, BM.
Jaswant (probably Daswant): *Razm*, Jaipur.
Kalam Dās: *Razm*, VA.
Kāleh Bahār: *Rām*, Washington.
Kālū Lāhorī: *Dārāb*, BM.
Kamāl: *Rām*, Washington, *Razm*, VA.
Kamāl *Chela*: *Jāmi*, Teheran.
Kamālī Jibillah: *'Iyār*, CB.
Kamāl Kashmīrī: *Tā'rīkh*, Patna.
Kanak Singh: *Khamsa*, BM.
Kanak Singh *Chela*: *Khamsa*, BM.
Kānhā: *Dārāb*, BM; *Dīwān*, Rampur; *Razm*, Jaipur; *Tā'rīkh*, Patna; *Akb*, VA; *'Ajā'ib*, CB.
Karamchand: *Dārāb*, BM.
Keshavdās: *Razm*, Jaipur.
Keshav Gujarātī: *Bāb*, BM.
Keshav *Kahār* (?): *Bāb*, Delhi.
Kesū: *Ā'in-i Akbarī*, I, p. 114; *Razm*, Jaipur, *Tā'rīkh*, Patna; *Akb*, VA.
Kesū Dās: *Dīwān of Shāhī*, Private Collection.
Kesū the Elder: *Dārāb*, BM; *Tā'rīkh*, Patna; *Akb*, VA; *'Ajā'ib*, CB.
Kesū the Younger: *Tā'rīkh*, Patna; *Bāb*, BM; *Akb*, VA; *'Iyār*, CB.
Kesū Gujarātī: *Iyār*, CB.
Kesū *Kahār*: *Dārāb*, BM; *Tā'rīkh*, Patna; *Jāmi*, Teheran.
Khwāja Jān Shīrāji: *Khamsa*, Baltimore (W. 624).
Khem: *Tā'rīkh*, Patna; *Bāb*, BM; *Bāb*, Delhi; *Akb*, VA; *Bah*, BL; *Jāmi*, Teheran.
Khemkaran: *Ā'in-i Akbarī*, I, p. 114; *Dārāb*, BM; *Khamsa*, BM; *Razm*, Jaipur; *Tā'rīkh*, Patna; *Akb*, VA; *Akb*, CB; *Bāb*, Delhi; *Nafāhat*, BM.
Khem the Younger: *'Iyār*, CB.
Khīman: *Akb*, VA; *Razm*, Baroda.
Khīman *Sangtarāsh*: *Tā'rīkh*, Patna; *Akb*, VA.
Khiẓr: *Bah*, BL.
Khiẓr *Chela*: *Bāb*, BM.

Khusrau Qulī: *Bāb*, BM.
Khwāja, 'Abdu'ṣ-Ṣamad: *see under* 'Abdu'ṣ-Ṣamad.
Lachhman: *Anwār*, Varanasi; *Bāb*, Delhi.
Lāl: *A'in-i Akbarī*, I, p. 114; *Razm*, Jaipur; *Tā'rīkh*, Patna; *Akb*, VA; *Akb*, CB; *Bah*, BL, *Khamsa*, BM; *Anwār*, Varanasi; *Bāb*, VA; *Jāmi*, Teheran.
Lālū: *Razm*, Jaipur.
Lokhā: *Bāb*, Delhi.
Lohangā *Chela*: *Khamsa*, BL, *Lailā-a Majnun*, London.
Lumānka: *Tā'rīkh*, Patna.
Lungā: *Bāb*, BM.
Madhū *Chela*: *Khamsa*, BM.
Madhū(o), or Madhū *Khana-zād*: *Ā'in-i Akbarī*, I, p. 114; *Razm*, Jaipur; *Tā'rīkh*, Patna; *Anwār*, Varanasi; *Akb*, VA; *Khamsa*, BM; *Bāb*, Delhi; *Bah*, BL; *Jāmi*, Teheran; *Nafāhat*, BM.
Madhū the Elder: *Dārāb*, BM; *Razm*, Jaipur; *Tā'rīkh*, Patna; *Akb*, VA; *Bāb*, VA.
Madhū the Younger: *Dārāb*, BM; *Razm*, Jaipur; *Tā'rīkh*, Patna; *Akb*, VA.
Mādhū Gujarātī: *azm*, Baroda.
Mahesh: *Dārāb*, BM; *Razm*, Jaipur; *Bāb*, BM; *Akb*, VA; *Anwār*, Varanasi.
Māh Muḥammad: *Akb*, VA.
Makrā: *Bāb*, BM; *Bāb*, Delhi; *'Iyār*, CB.
Manī: *Ā'in-i Akbarī*, III, pp. 336-37; *Dārāb*, BM; *'Iyār*, CB; *Razm*, Jaipur; *Bāb*, BM; *Akb*, VA.
Manohar: *Dīwān*, Rampur; *Tā'rīkh*, Patna; *Bāb*, BM; *Anwār*, Varanasi; *Akb*, CB; *Khamsa*, BM; Johnson Collection, London.
Manṣūr *Naqqāsh* (or Manṣūr): *Bāb*, BM; *Akb*, VA; *Jāmi*, Teheran.
Manū: *Razm*, Jaipur.
Maulānā Ibrāḥīm: *Ma'āṣir-i Raḥīmī*, f. 754 b, cited from Mahfuz ul Haq, 'The Khan Khanan and his painters," *Islamic Culture*, V, 1931, p. 627.
Mathurā: *Dārāb*, BM.
Meharchand: Berlin; Johnson Collection, London.
Mīr Saiyid 'Alī: *Ā'in-i Akbarī*, I, pp. 114, 660; Louvre; *Khamsa*, BM; Ardeshir Collection, Bombay.
Mīr Taqī: *Akb*, CB.
Miskīn: *Ā'in-i Akbarī*, I, p. 114; *Dārāb*, BM; *Razm*, Jaipur; *Tā'rīkh*, Patna; *Anwār*, Varanasi; *Akb*, VA; *Bāb*, Delhi; *Bah*, BL; *Jāmi*, Teheran.
Miskīnā: *Razm*, Jaipur; *Tā'rīkh*, Patna; *'Ajā'ib*, CB; *Khamsa*, BM.
Mohan: *Rām*, Washington.
Mohan Shankar: Johnson Collection, London.
Muḥammad Kashmīrī: *Tā'rīkh*, Patna; *Jāmi*, Teheran; *Bāb*, Delhi.
Muḥammad Miskīn: Johnson Collection, London.
Muḥammad Sharīf: *Ā'in-i Akbarī*, I, pp. 532-3; *Muntākhābu't Tawārīkh*, III, p. 430, *Razm*, Jaipur.
Muḥammad Taqī: Los Angeles Country Museum of Art, New York.
Mukhlis: *Dārāb*, BM; *Razm*, Jaipur; *Tā'rīkh*, Patna; *Bāb*, BM; *Akb*, VA; *Bah*, BL.
Mukund: *Ā'in-i Akbarī*, I, p. 114; *Razm*, Jaipur; *Tā'rīkh*, Patna; *Anwār*, Varanasi; *Akb*, VA; *Akb*, CB; *Rhamsa*, BM; *Bah*, BL; *Jāmi*, Teheran; *Bāb*, VA.
Mullā' Shāh Muḥammad: *Tā'rīkh*, Patna.
Munīr: *Razm*, Jaipur.
Mushfiq: *Rām*, Washington.
Nadīm: *Rām*, Washington.
Nādir: *Rām*, Washington.
Nāmā: *Dārāb*, BM; *Razm*, Jaipur; *Tā'rīkh*, Patna; *Bāb*, BM.
Nāmān: *Tā'rīkh*, Patna; *Ahb*, VA.
Nand: *Akb*, VA; *Bāb*, Delhi.

Nand Gawalyārī: *Tā'rīkh*, Patna; *Anwār*, Varanasi; *Bāb*, BM; *Bāb*, Delhi; *Akb*, VA; *Khamsa*, BM; *Jāmi*, Teheran.
Nadirā Bāno: *Nafāhat*, BM.
Nand Kumār: *Bāb*, Delhi.
Nānhā: *Dārāb*, BM; *Razm*, Jaipur; *Tā'rīkh*, Patna; *Akb*, VA; *Khamsa*, BM; *Jāmi*, Teheran.
Narāin: *Dārāb*, BM; *Tā'rīkh*, Patna; *Bāb*, BM; *Akb*, VA.
Narsingh: *Dīwān*, Rampur; *Tā'rīkh*, Patna; *Bāb*, BM; *Akb*, VA; *Bah*, BL, *Khamsa*, BM; *Bāb*, Delhi.
Naqī *Khana-zād*: *Bāb*, Delhi.
Pāk: '*Iyār*, CB; *Razm*, Baroda.
Pāras: *Dārāb*, BM; *Razm*, Jaipur; *Tā'rīkh*, Patna; *Bāb*, BM; *Akb*, VA; '*Iyār*, CB.
Pāras *Kahār*: *Dārāb*, BM.
Payāg: *Bāb*, BM.
Pidārath: *Bāb*, BM; *Akb*, CB.
Prem: *Bāb*, Delhi.
Premjīu (or Prejīv Gujarātī); *Tā'rīkh*, Patna; *Bāb*, Delhi; *Akb*, VA.
Qabūl: *Razm*, Baroda.
Qabūl Aḥmad: *Akb*, VA.
Qabūl *Chela*: *Dārāb*, BM.
Qāsim: *Shāh*, BM.
Qutub *Chela*: *Akb*, VA.
Rām: *Ā'in-ī Akbarī*, I, p. 114.
Rāmdās: *Razm*, Jaipur; *Tā'rīkh*, Patna; *Bāb*, BM, VA; *Akb*, VA; *Jāmi*, Teheran.
Sādi: *Rām*, Washington.
Sādiq: Ardeshir Collection, Bombay.
Sāhū: *Tā'rīkh*, Patna.
Saindās: *Bah*, BL.
Sālman: *Bah*, BL.
Sānwalā: *Ā'in-i Akbarī*, I, p. 114; *Dārāb*, BM; *Dīwān*, Rampur, *Razm*, Jaipur; *Tā'rīkh*, Patna; *Anwār*, Varanasi; *Bāb*, BM; *Akb*, VA; *Akb*, CB.
Sarjū Gujarātī (or Surjū, or Surjīu): *Tā'rīkh*, Patna.
Sarwan: *Dārāb*, BM; *Razm*, Jaipur; *Bāb*, BM; *Bāb*, Delhi; *Akb*, VA.
Shankar: *Dārāb*, BM; *Razm*, Jaipur; *Tā'rīkh*, Patna; *Anwār*, Varanasi; *Bāb*, BM; *Akb*, VA, CB.
Shankarān: *Razm*, Jaipur.
Shankar Gujarātī: *Bāb*, BM; '*Iyār*, CB.
Shīrū: *Razm*, Messrs Maggs' Catalogue, No. 452 (1924).
Sheodas (or Shivdās): *Dārāb*, BM; *Bāb*, BM, Delhi; '*Iyār*, CB.
Sheorāj: '*Iyār*, CB.
Sheorāj Gujarāti: '*Iyār*, CB.
Sheorām: Cowasji Jehangir Collection, Bombay.
Shiyām: *Bāb*, BM.
Shiyāmsundar: *Rām*, Washington.
Sūr: *Tā'rīkh*, Patna.
Sūraj: *Tā'rīkh*, Patna.
Sūraj Gujarātī: *Tā'rīkh*, Patna.
Sūrdās: *Tā'rīkh*, Patna; *Bāb*, Delhi; *Akb*, VA; CB.
Sūrdās Gujarātī: *Khamsa*, Baltimore; *Jāmi*, Teheran; *Akb*, BM.
Surjan: *Dārāb*, BM; *Razm*, Jaipur; *Tā'rīkh*, Patna; *Bāb*, BM.
Sūryā Gujarātī: *Bāb*, BM.
Sūrū (or Savrū): *Bāb*, BM.
Tāluk: *Dārāb*, BM.
Tārā: *Ā'in-i Akbarī*, I, p. 114; *Dārāb*, BM; *Razm*, Jaipur, *Tā'rīkh*, Patna.

Tārā the Elder: *Akb*, VA.
Thirpāl (or Tirpāl): *Razm*, Jaipur; *Bāb*, BM; *Jāmi*, Teheran.
Tilok: *Bāb*, BM.
Tiriyā: *Dārāb*, BM; *Tā'rīkh*, Patna; *Bāb*, BM; *Akb*, VA.
Tulsī: *Razm*, Jaipur; *Bāb*, BM, Delhi; *Akb*, VA.
Tulsī the Elder: *Dārāb*, BM, *Tā'rīkh*, Patna; *Razm*, Jaipur; *Bāb*, BM; *Akb*, VA.
Tulsī the Younger: *Bāb*, BM.
Yā'qūb Kashmīrī: *Bāb*, VA.
Yūsuf 'Alī: *Rām*, Washington.
Zain al-'Abīdīn: *Rām*, Washington.

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'Aja'ib al-Makhluqāt, Chester Beatty, Dublin, 16 miniatures.

Akbarnāma, Victoria and Albert Museum, London, I.S. No. 117, 117 miniatures; Chester Beatty, Dublin, 61 miniatures; British Museum, London; Freer Gallery of Art, Washington, No. 39.57.

Anwār-i Suhaili, School of Oriental and African Studies, London, 24 miniatures; Bharat Kala Bhavan, Varanasi, No. 9069, 25 miniatures; British Museum, London, Add. 18, 579, 34 miniatures.

Bāburnāma, British Museum, London, Or. 3714, 116 miniatures; National Museum, Delhi, N.M. 50.326, 145 miniatures; Museum of Oriental Culture, Moscow, 69 miniatures; Victoria and Albert Museum, London, 17 miniatures; Fogg Art Museum, Boston, 1 miniature.

Bahāristān of Jāmī, Bodleian Library, Oxford, (Elliot MS. 254), Cat. No. 963, 6 miniatures.

Dārābnāma, British Museum, London, Or. 4615, 156 miniatures.

Devalrānī Khīzr Khān of Amīr Khusrau, National Museum, Delhi, 2 miniatures.

Dīwān of Shāhi, Private Collection, USA, 2 miniatures.

Dīwān of Anwarī, Fogg Art Museum, Boston.

Dīwān of Ḥāfiẓ, State Library, Rampur, 11 miniatures; Chester Beatty, Dublin.

Hamzāhnāma, Volberkunde Museum, Vienna, 60 miniatures; Freer Gallery of Art, Washington, 3 miniatures; Museum of Fine Arts, Boston, 2 miniatures; Chester Beatty, Dublin, 2 miniatures; Fogg Art Museum, Boston, 1 miniature; Prince of Wales Museum, Bombay, 1 miniature; Bharat Kala Bhavan, Varanasi, 1 miniature.

'Iyār-i Dānish, Chester Beatty, Dublin, 96 miniatures; Prince of Wales Museum, Bombay, 52 miniatures.

Jāmi 'ut Tawārīkh, Imperial Library, Tehran, 98 miniatures.

Jog-Bashisht, Chester Beatty, Dublin, 41 miniatures.

Khamsa of Nizāmī, Dyson Perrins Collection, British Museum, London, Or. 12,208, 38 miniatures.

Muaqq'a-i Gulshan, Imperial Library, Tehran.

Rāmāyan, Freer Gallery of Art, Washington, No. 07.271, 130 miniatures.

Razmnāma, State Museum, Jaipur, 169 miniatures; Freer Gallery of Art, Washington, No. 54.6; State Museum and Picture Gallery, Baroda, No. 198/1-32, 32 miniatures.

Shāhnāma of Firdausi, Bodleian Library, Oxford, MS. Ouseley, Add. 175.

Tā'rīkh-i Alafī, Ajit Ghosh Collectton, Calcutta; Collection of H.A.N. Medd, New Delhi, 2 miniatures.

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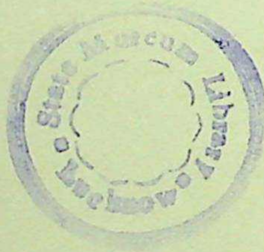
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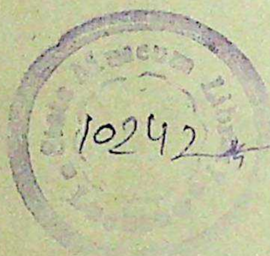
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Jacket Design: Vikas Studio

1V02V0701

ISBN 0 7069 0595 4

